

THE BOARD OF HEALTH

AND

THE CHOLERA:

A MEMOIR

OF THE

SALINE TREATMENT.

By
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R31751

INTRODUCTION.

IN the summer of the year 1849 the Cholera appeared in the city of Worcester, where I happened to be resident as a public Journalist, and the fact naturally engaged much of my attention. There was less professional reserve maintained in regard to that disease than usual; the public were even invited by the Board of Health to make themselves acquainted with the nature of its symptoms, and the treatment that ought to be adopted in cases of attack before the arrival of medical assistance.

In such circumstances it is not wonderful that I should have acquired some information on the subject, nor that the study of the history of so terrible a disease should have presented to me a considerable degree of attraction. It happened, too, that I had had the good fortune to make the

acquaintance of Dr. William Stevens, of St. Croix, the author of the saline treatment in Yellow Fever, which had been applied with an almost magical degree of success in Cholera, in the British metropolis, during the first visitation of the jungle fiend to this country in 1832. I acquired, in conversation with Dr. Stevens, much information respecting the disease, especially with regard to the introduction of the saline treatment; and at a very early stage of my enquiries, I discovered that that treatment, although eminently successful at the very outset, had not been generally adopted. I soon acquired a key to the mystery of its rejection; and assuredly I found enough to excite my surprise as I unravelled the meshes of the web of deception that had been so cunningly wound about the new practice in the then new disease.

A humorous Scotch advocate of the last age once commenced a pleading before the Lords of Session in these words—"My Lords, whereas it has pleased Almighty God that Town Councils should always be in the wrong," *mutatis mutandis*, it would almost seem that even this singular ex-

ordium might be applied to the Central Board of Health. I found that in the year 1832, on the faith of an investigation of a few minutes in duration, conducted not only with indecent haste, but with a degree of levity that shocked the witnesses who describe it, *and begun and ended in the absence of Dr. Stevens*, the new practice was condemned by the Board of Health, and a series of machinations emanated from within and was carried out by that body calculated greatly to injure its reputation. It is chiefly to be ascribed to these machinations that up till the present day a treatment which well deserves to be ranked as a specific for Cholera, is practically known to comparatively a small portion only of the medical profession.

It is the object of the following pages to exhibit in what manner this enmity of the Board of Health was brought to bear against the reputation of the saline treatment, and to expose the minor causes that have contributed to deprive mankind of the benefit that must have arisen from its general adoption. The extent of that deprivation may to some extent be calculated by a

consideration of the following facts, for which I am indebted to an able "Lecture on Public Health, by Mr. William A. Guy, M.B., Cantab :"—"It has been estimated from official returns, that between the 18th of June and the 18th of October, 1831, the Cholera had destroyed, in different parts of Europe, upwards of 150,000 persons. The deaths in England and Wales, in 1831-32, were about 21,000; in Scotland nearly 11,000; in Ireland upwards of 21,000. In London there were upwards of 11,000 cases, and 5,275 deaths. Of the recent epidemic, it may suffice to state that it spread more rapidly from place to place; that it visited nearly the same countries and cities which it attacked in 1831-32; and that it occasioned almost everywhere a much higher mortality. The returns for England and Wales are not yet complete; but it is probable that the number of deaths was nearly three times as great as in the first epidemic. In London, without making any allowance for increase of population, the mortality in the two epidemics was nearly as one to three. The deaths in 1832 were, as I

"Medical Times," November 29, 1851.

have stated, 5,275; in 1848-9, they have exceeded 14,500. In 1832, one person died out of 282 living; but in 1848-9, one person died in every 151 living."

The Cholera was the same disease in 1848-9 as it was in 1831-2; and from the facts recorded in the medical journals of these periods, it is evident that the saline treatment was much more practised by the profession in the visitation of 1832 than in the year 1849. It is, therefore, not a very violent presumption that the great increase in the mortality during the latter is, in some measure at least, to be ascribed to the falling off in the practice of the new treatment. It will be very easy for me, unhappily, to prove the appropriateness of the Scotch Barrister's strong characteristic of Town Councils to the Board of Health in respect to the conduct of the latter connected with Cholera. In 1832, the Board of that day sought to put down the saline treatment by a line of procedure which, I venture to say, has few parallels on record; and in the year 1851, the Central Board of the present day, fulminated a doctrine which, I may also venture to say, for fallacy and intrepidity of

assertion, has not only no parallel among the calm proceedings of scientific and learned bodies, but which can scarcely be paralleled for these qualities among the mendacious bulletins of Napoleon himself.*

I am referring now to a declaration made by the Board of Health in the month of January

* It would seem that the Board of Health's fatuous bias has not been confined to the Cholera; *vide* the following extract from the "Morning Chronicle" of August 8th, 1851, referring to the examination of Dr. Challice, of London, in regard to a case of poisoning from the use of Thames water:—"Dr. Challice was requested to wait on the Board, and he had an interview with that body *tête-à-tête*. It may be here necessary to observe, that, notwithstanding its collective style, the Board of Health consists virtually of a single individual—not, however, unprovided with assistance. After a confidential conversation of considerable length, Dr. Challice took his leave, in the expectation of a summons to give formal evidence on some future occasion. No such invitation ever arrived; but a Blue-book appeared, in which judicious selections from the conversation were printed *verbatim*, while the remainder was altogether omitted. A short-hand writer had been present without the knowledge of the witness—who, indeed, was not aware that he was giving 'evidence.' If we are not misinformed, the same contrivance has been adopted during still more confidential conversations; but the case to which we refer is sufficient to destroy all faith in the statements authenticated by the Board of Health. If extracts from conversations are to be published to the world as evidence, the involuntary witnesses ought to be subjected to some cross-examination, or at least to be allowed the opportunity of correcting their statements. It is to be hoped that no important duties will henceforward be entrusted to a body capable of allowing such proceedings."

last, in reply to an application by the West India merchants of London for medical aid to the Island of Jamaica, then suffering fearfully from Cholera. That declaration was, "*that the medical experience of Europe enabled them to state that for the collapse stage of Cholera there was no cure.*" This most disheartening and mischievous dogma was instantly contradicted by one of the medical officers of the Board itself. Dr. Bowie, inspector of Cholera districts under the Board of Health, reminded it that both in 1832 and in 1849 he had had officially occasion to report to the Board numerous cases of the cure of Cholera in the collapse stage; and it is one object, and not the lightest, of the following pages to exhibit how entirely groundless and unfounded that most depressing dogma is. It will be shewn that instead of its being true that the experience of Europe instructs any such horrid fact, the bearing of experience is exactly the reverse. Experience has proved that when the saline treatment is honestly and zealously practised, the disease, even in the collapse stage, is exceedingly manageable, and that, so far from that stage being

incurable, in hundreds of cases treated on the new plan the mortality was under three per cent.

It is foreign to my purpose to search after the cause that actuated the most active medical member of the Board of Health in his relentless animosity towards the new practice. That individual, I regret, no longer exists; but I feel that the great public interest involved ought not to be allowed to suffer on that account; and, indeed, a strong conviction that far too much deference has been already paid to mere matters of personal reference, has tended in no inconsiderable degree to induce me to step so far out of my way as to put forth the following statement.

Whatever the cause was, the effect has been disastrous. It has prevented the adoption of a treatment under which, as is proved in the sequel, the mortality from Cholera may be reduced to a very insignificant per centage.* Moreover, the Board of Health of the present day have accepted the decision of their predecessors

* A remarkable instance occurring under my own notice at Worcester of the lasting injury inflicted on the new practice will be found detailed at page 154, *et seq.*

against the new treatment, as appears by their excluding it entirely from any consideration of what they have been pleased to term "the medical experience of Europe," which they did when they made the above most extraordinary declaration of the incurability of Cholera in the collapse stage.

I am quite conscious that the present task has not been undertaken by the most competent agent for its performance ; and indeed it will appear in the body of the memoir that, independently of the author of the new treatment himself, there are at least two other practitioners from one or other of whom, in the ordinary course of things, such a work might have been expected, not as an ungrateful task but as a labour of love. The first of these is Mr. Wakefield, the Surgeon of Coldbath-fields prison, the scene where the saline treatment was first tried on a large scale, and where it succeeded in a degree equal to, if not surpassing, the highest triumphs recorded of the healing art. But Mr. Wakefield, since he related its decided success in grateful terms, a few weeks after the outbreak of the disease among the poor people under his care, has remained

invincibly silent, and even callously permitted the truth of his published statement, and the merits of the treatment, to be impugned in published official documents, which, acquainted as he was with the facts, he must have known to be incorrect, without a word of remonstrance.

The other practitioner, to whom one would, on reading the history of the saline treatment, naturally assign the office of defending it from malignant misrepresentation, is Mr. Marsden, of the then Free Hospital, Greville-street. In 1832, that gentleman expressed his high sense of its merits in glowing terms, and in 1834 he repeated his commendation ; but he has since refrained from any attempt at refuting the attacks of its calumniators, and even—unwittingly or otherwise—done that which in no small degree has tended to enforce their attacks.

But it may be said that the most natural defender of the saline treatment and assertor of its claims upon general attention is its author. It will be seen in the sequel that Dr. Stevens has not been careless nor indifferent to its fate. For, notwithstanding his long absence in a distant part

of the world, at three different periods extending over nineteen years, he has endeavoured, unsuccessfully, to procure from the Government an enquiry into its results in Coldbath-fields prison. His object in these efforts, as in the original communication to the public of his mode of treatment, has been simply the public good, and he took care to inform the Government in his first application for an enquiry that he had no other end in view.

Indeed few men could so well afford as the author of the saline treatment to regard with equanimity the abeyance of personal fame from the general adoption of his discovery. His conduct had received the approbation of many of the ablest men of that day ; and in 1834 Dr. Stevens had the honour to be chosen by the University of Oxford, on the inauguration as Chancellor of the Duke of Wellington, as one of the three members of the medical profession to whom it was decided to do honour on that occasion on account of their eminent attainments in the science of the healing art. Accordingly he received the honorary degree of D.C.L. in a convocation held July 12th, 1834, in company with John Robert Hume, M.D.,

and Sir Astley Cooper, Bart. This high honour having been conferred upon Dr. Stevens two years after the Board of Health's endeavours to destroy the reputation of his new practice and his own personal character for veracity, may be regarded as a proof that the University of Oxford regarded the Board of Health as anything but infallible. In the course of the memoir it is narrated that Dr. Stevens had the honour conferred upon him by the Magistrates of the county of Middlesex, in Quarter Sessions, of a vote of thanks, and was also by them presented with a piece of plate, value a hundred guineas, as an expression of gratitude for his valuable services in combating the Cholera in the county prison of Coldbath-fields. I have much pleasure in concluding this schedule of public marks of esteem bestowed on Dr. Stevens for his philanthropy and talents, by stating that his late Majesty Christian VIII. of Denmark, out of his princely appreciation of Dr. Stevens' valuable services in his dominions—by introducing the saline practice in the treatment of the Asiatic Cholera in Europe, and of the Yellow Fever in the Danish West India islands, and for having

otherwise reflected credit on the Danish Crown by his discoveries in medicine and surgery—bestowed on him such a reward as a Royal Mæcenas might not have blushed to bestow on the man whom he most highly delighted to honour.

It thus appears that Dr. Stevens has adopted those steps which, in the present state of the medical world, he judged the best to be followed, in order to clear away the impediments cast in the path of his great discovery ; and these having hitherto failed, he has refrained from an appeal to the public—among other reasons, because he now is and has been for years intensely occupied on another object of enquiry of still higher importance to human welfare. The present memoir, however, has been drawn up with his knowledge and approval. It is founded chiefly upon official documents obtained from the prison of Cold-bath-fields, which were kindly placed at the disposal of Dr. Stevens by the Visiting Magistrates of the county of Middlesex, and the most important of which are verified by the Governor and Infirmary Warder of the prison.

In these circumstances I respectfully submit that a clear case for Official enquiry has been made out,

and I need scarcely point to the utility of such an investigation: if it establish the reality of what I offer to prove, an authoritative announcement to that effect must be attended by the happiest result—the general adoption of a specific for so fatal a disease; but should it prove adverse, the harm done will not be great, since the facilities for the enquiry will render it comparatively brief and inexpensive. I may also suggest that the evidence adduced from Coldbath-fields prison alone sufficiently constitutes a *prima facie* case in support of enquiry which no tribunal ought to resist, and I venture to say that the sham enquiry of twenty minutes of June 1832, on which the Board of Health of that day with, to say the least of it, the most culpable carelessness set aside the gigantic claims of the new treatment, has been demonstrated to be so worthless, even propped up as it was by other nefarious devices, that it cannot be used a second time as a stalking-horse to evade a fair enquiry by any public body or department of Government.

Finally I assert and offer to prove—

First—That in Coldbath-fields prison, from April 5th to the 31st of December, 1832, 465

persons were treated on the saline plan for Cholera with a result of 461 recoveries and 4 deaths.

Secondly—That in the same place, during the same period, about 162 patients in the collapse stage of Cholera were treated on the saline plan with a result of 158 recoveries and 4 deaths.

Thirdly—That by the concurrent testimony of respectable practitioners in England, Scotland, Ireland, and Canada, the new practice, when fairly tried, either at home or abroad, was equally efficacious in the epidemic of 1848-9 as in the visitation of 1832.

Further, I offer to prove that the new practice was eminently successful in a number of other prisons and hospitals of London in the year 1832; and I firmly believe that I am able to prove all the details to the last fraction of the amount stated; but I submit that, allowing a wide margin for errors of account, and supposing that to be filled up, more than enough will still remain to justify my request for an enquiry at the hands of Government. I may adduce also, in support of this memoir's claims to attention, the fact that Mr. Marsden, of the Free Hospital,

Greville-street, has publicly declared* that out of eighty-one patients brought to the hospital in the summer of 1832 in a state of collapse, who were treated on the saline plan, there were seventy-four recoveries and seven deaths.

My request for enquiry is so strongly supported by the body of evidence adduced in the following memoir, it is so reasonable in itself, and involves matter of so great importance to the welfare of the public, that I can hardly bring myself to believe that it can be refused. I am prepared to enter into the investigation at any moment, and I shall only be too happy should my endeavours have conducted in any degree to the attainment of so desirable an object as the lessening of human suffering.

JAS. M'MILLAN.

WORCESTER, JANUARY 1ST, 1852.

* "Practical Treatise on Cholera," 1834.

C O N T E N T S .

[The history of the Saline Treatment has been prefaced by a sketch of the nature and treatment of Cholera, which is not, however, intended to serve any other purpose than to afford the general reader the means of comparing Dr. Stevens' theory and practice with those of the Board of Health. On a perusal, it may be safely left to any person, in the slightest degree acquainted with induction, to decide which is the empirical and which the scientific practice.]

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ERRATA.

Page 7, line 18, for "1835" read "1833."

Page 10, line 2, for "vena" read "venæ."

Page 13, line 5, for "Dr. William Turner" read "Dr. Edward Turner."

Page 52, line 14, for "And from the cessation of *his* attendance" read "And from the cessation of *Dr. Stevens'* attendance."

Page 57, line 10, for "from the 30th of April" read "from the 5th of April."

Page 86, line 15, for "*examing* Barristers" read "*examining* Barristers."

Page 133, line 17, for "82 patients" read "89 patients."

Page 137, line 6, for "467" read "465;" and line 8, for "463" read "461."

Page 156, line 3, for "1832" read "1849."

Page 196, line 2, for "462 recoveries" read "461 recoveries."

Page 197, line 10, for "307" read "306;" for "304" read "303;" and line 11, for "466" read "465;" and for "462" read "461."

THE BOARD OF HEALTH

AND THE

C H O L E R A .

CHAPTER I.

DR. STEVENS' THEORY OF CHOLERA.

THE remote causes or poisons of Cholera and the Yellow Fever are essentially different, but in both cases the poisons produce their effects in the same way ; or, in other words, both the poisons produce their effects by their absorption into the circulating current, causing a morbid condition of the living blood, by which it becomes divested of its saline ingredients, and is thereby rendered incapable of carrying on the circulation and supporting the material life of the body. The remote cause by which the morbid state of the blood is produced in Yellow Fever and Cholera, is a specific aërial poison which is inhaled by the lungs, and thence taken into the circulating blood. The nature

of those specific poisons is as yet but little understood: in Yellow Fever, it requires a certain degree of heat in the atmosphere to enable it to acquire and to maintain its virulence, so that when the thermometer either rises above or falls below a certain range it disappears. On the contrary, the poison of Cholera seems impervious to atmospheric influence, and is known to prevail with almost equal intensity in the highest as well as the lowest temperature, and, indeed, it is nearly alike in all states of the atmosphere. It is not rendered inert by the first morning of frost, as is the case with Yellow Fever in the United States, for the poison of Cholera has been almost as fatal in the depth of a Russian winter as in the burning atmosphere of the Torrid Zone.

There is also a remarkable resemblance between the symptoms in Cholera and in malignant West India Fevers. In those fevers sickness of the stomach is generally met with at the commencement of the attack, because the specific aërial poison, which is their remote cause, has been thrown off from the circulation into the gastric organs, which are by that means irritated into nausea and vomiting. This gastric irritation is, however, different from that which comes on at another period of the disease, and is often very distressing in the last stage. The latter sickness is produced in a great measure

by an excess of acidity in the gastric organs : there is, indeed, in all the malignant fevers of the West Indies, especially in the last stage, an excess of acidity in the alimentary canal, and this peculiar condition is perceptible throughout the whole extent of the mucous membrane, from the tongue to the anus. Litmus paper is reddened on being applied to the tongue, and on being dipped in the fluids ejected from the stomach, it reddens almost as suddenly as if it had been immersed in pure acid. The matter of black vomit, which is merely an effusion of the dissolved blood divested of its saline matter, receives such an addition of fixed acid in the stomach, that it effervesces freely with the alkaline carbonates. At the commencement of these fevers the colour of the blood is dark, and the darkness is an effect of the specific aërial poison ; but the blackness of the colour in the last stage is produced by the loss of those saline ingredients which are the cause of the red colour of healthy blood. In this stage of the fever oxygen is not admitted into the circulation by the lungs on the removal of the carbonic acid. The aërial poison by which Cholera is produced, like that of all malignant fevers, possesses the power of multiplying itself. The body of each patient becomes a nucleus of contamination ; the poison emanating from the bodies and excretions of the sick taint

the air around, and the disease is propagated from being inhaled by other bodies already predisposed to receive its influence. This poisoned state of the blood is the immediate cause of the symptoms in Cholera, and to some extent it paralyses the heart and whole vascular system. After death the blood is invariably dark coloured and grumous.

In Cholera the symptoms are in general very similar. There is sickness of the stomach at the commencement produced by the poison being thrown from the tainted blood into the gastric organs. There is in Cholera, as in Yellow Fever, an excess of muriatic acid in the stomach: and the excess of that acid probably arises from the decomposition of the saline ingredients of the blood through the agency of electricity. The presence of the excess of muriatic acid in the stomach is the cause of the intense burning sensation, the local irritation, and the thirst.

The disease usually manifests itself in three stages; the first presents diarrhœa and vomiting. These symptoms are an effort of nature to expel the morbid poison from the blood and the body; the addition of cramps or spasms and sinking of the pulse form the second, and collapse the last stage of the disease. In the latter dismal phase of Cholera the circulation is arrested, neither heat nor vital electricity is evolved, the

body becomes cold from the non-evolution of heat, sensation ceases, and death speedily ensues.

A consecutive fever, which too frequently follows the usual practice, has by many, and especially by the Board of Health, been regarded as one of the stages of Cholera, but this opinion is evidently wrong, seeing that in many hundreds of cases treated on the saline plan almost none exhibited any febrile symptom whatever, and in the two or three cases where some degree of fever supervened, this effect was easily traced to other causes than the Cholera. According to Dr. Stevens, the fever so prevalent and so fatal in Cholera when treated with opium and brandy, or monster doses of calomel and other drugs, is the result of those poisons operating in a specific manner on the morbid systems of the patients; and it may be regarded as one of the greatest points of its superiority that the saline treatment has been hitherto free from so fatal a concomitant. Drs. Russell and Barry* state that Dr. Reimer, of St. Petersburg, informed them that of twenty cases of Cholera in a St. Petersburg Hospital, seven died in the cold or collapse stage, and thirteen in the consecutive fever.

* *Medical Gazette*, November, 1831.

CHAPTER II.

THE BOARD OF HEALTH (1832) THEORY OF CHOLERA.

VERY different from the foregoing theory of the cause of the disease was that propounded by the Board of Health. That body despatched Drs. Russell and Barry to Russia in 1831, in order that they might acquire practical information of the Cholera, which had then penetrated to St. Petersburg, and even reached the shores of the Baltic. Those gentlemen enjoyed ample opportunities of acquiring the necessary information, but it seems doubtful whether they availed themselves of the facilities within their reach: at all events, on their return they presented, as the result of their researches, not a single observation including any fact of importance unknown before, nor anything in the shape of theory save the most vague and unscientific surmises.

The remote cause of Cholera, they said, were certain germs which produced their effect by acting on a certain part of the spinal cord, which they declared to be the great source of vitality and function. A softened spinal cord they declared to be the seat and cause of the disease; and to prove this they stated that this condition of the

spinal cord had been observed in the autopsy of some cases of Cholera. The originating germs, they said, produced a purgative effect, and they divided the disease into three periods—the promonitory, the collapse, and the fever stages.*

This theory of Cholera rapidly sank into the contempt which it so richly deserved, for surely anything more jejune and unscientific it would be difficult to conceive than its assumptions of propagation by “germs,” and of these producing “softened state of the spinal marrow.” It is unnecessary, however, to dilate on its absurdity. Well might one author say, in respect to their expedition, “the Doctors returned little wiser than before they went,” and of their general conduct, that “the medical department of the Board of Health, on the close of their labours in the autumn of 1835, had afforded the profession not the slightest knowledge on the subject, either physiological or pathological.”†

The latest theory of Cholera that has passed under the eye of the writer, is that by Dr. G. A. Parkes, contained in his work entitled “Researches into the Pathology and Treatment of Asiatic and Algide Cholera.” At page 4, this author says—“The leading idea I have formed of

* *Medical Gazette*, September, 1831.

† Dr. Marsden's *Practical Treatise on Cholera*, page 8.

Cholera is not only that it is primarily a disease of the blood, as has been so generally surmised, but that the changes induced in the functions of respiration, directly consequent on the alteration of the blood, are the proper and distinctive symptoms of the disease." At page 31, Dr. Parkes says—"The most important physical changes in the blood after death are the coagulation and its change of colour." At page 33 he says—"Nitrate of potash, or chloride of sodium added to the blood, always give a bright arterial hue;" and at page 46 he adds—"The fluid in the intestinal canal (after death) and the peculiar stools consist of part of the water and salts of the blood mixed with a proteine constituent."

These observations of Dr. Parkes thus strikingly confirm the theory of the nature and cause of the disease originally propounded by Dr. Stevens; but it seems remarkable that the former should have been entirely ignorant of that theory, which we may presume he was, seeing that he does not once refer in his work from which we have now quoted to Dr. Stevens' Treatise on the Blood, which may be regarded as the institute of all those treatises which regard Fever and Cholera as diseases of the blood.

CHAPTER III.

DR. STEVENS' VIEWS OF THE BLOOD.

IF the sanguineous theory of Cholera be accurate, a knowledge of the physiology and pathology of the blood must be of the first importance ; and therefore a brief account of Dr. Stevens' views on those subjects is inserted here. In the year 1827 he resided in the Island of St. Thomas, in which the Yellow Fever was then prevalent. It was found that the usual modes of treatment were powerless to combat the disease, and almost in despair he had recourse to the scalpel. The autopsy of patients recently dead from the fever invariably presented a great loss of the saline matter of the blood ; from reasoning on that fact, Dr. Stevens came to the conclusion that this loss was the immediate cause of death, and thereby he was led to regard a restoration of that important ingredient of the vital fluid as presenting the most likely means of cure. He was happy enough to effect this most successfully by administering a mixture of the neutral salts, viz., muriate of soda, carbonate of soda, and nitrate of potash in solution. He found that when these were taken into the stomach largely, a great

portion entered directly unchanged into the circulation through the vena cavæ; the effect on the blood was instantaneous; it was reddened and its vital power restored. A part of the salts remained in the circulation while the excess was removed by the secreting organs carrying off with it the deadly poison from the living blood.

The following summary of Dr. Stevens' new views of the nature of the blood appeared in a treatise which he published in 1832:

"1. All acids give a dark colour to the globular matter of healthy blood, and, in proportion to their strength, they change its colour from red to black, as certainly as they change vegetable colours from blue to red. When any one of the acids was diffused in a small quantity of water, and then mixed with the fluid arterial blood, the colour of the whole was immediately changed from bright red to black. Even the vegetable acids so completely blackened the blood, that the addition of a little water enabled even the citric acid to convert the whole into a fluid exactly resembling the black vomit.

"2. The pure alkalies have a similar effect with the acids in changing the colour of the blood from red to black, though not in the same degree.

"3. The whole of the neutral alkaline salts immediately changed the venous blood from a dark modena red to a bright arterial colour.

"4. Even those salts which contain an excess of alkali—the sub-carbonate of soda for example—immediately changed the venous blood to a beautiful bright arterial colour.

"5. When the neutral salts were mixed with the dark and dissolved blood that had been taken from the heart of those

that had died from Yellow Fever, even this black and dissolved fluid was immediately changed from black to a colour that was highly arterial."

From those facts he concluded that black is the original hue of the colouring matter, consequently that the blood owes its arterial or scarlet colour to the saline matter which it contains. The blood taken from Cholera patients, like that of those in Yellow Fever, is black, but it is also capable of recovering its natural tint when treated with an artificial serum; hence he conceived that this, as well as the dark colour of the blood in Yellow Fever and other pestilential diseases, is the effect of a specific poison in the vital fluid, and that its black colour in the last stage of the disease is produced by the loss, or the great diminution, of the saline ingredients of the blood, or of that electric ingredient in saline matter which constitutes, according to his new views of vitality, one of the two electric lives of the blood and of the solid structures of the body.

Dr. Stevens' views respecting the nature of the blood may thus be considered as a key to his treatment of Cholera and the malignant fevers of the West Indies; we, therefore, add here the opinions of his discoveries of those distinguished chemists, Messieurs Brande and Turner. Mr. Brande, in his "Dictionary of Chemistry," under the article "Blood," observes—

“ The colouring matter of the blood, hæmatosine, may be obtained by evaporating its aqueous solution at a temperature below 100° ; it then appears almost black, but resumes its red colour when dissolved in water. It is soluble in acids and in alkalies; these solutions are dark coloured, but when mixed, so as to become *neutral*, the hæmatosine falls of a bright red colour. Accordingly, when the clot of blood is put into acids, it becomes brown or blackish, and is very similarly discoloured by alkalies; but most neutral salts render it florid. Dr. Stevens has shown that carbonic acid in venous blood is the probable cause of its dingy hue, and that the saline matter of the serum confers the florid red upon arterial blood; and that by washing the saline matters out of the bright coagulum of arterial blood, it gradually loses its brilliancy and resembles venous coagulum.”

And again, under the head “ Respiration,” the same author says—

“ The great end which appears to be answered by respiration is the removal of carbon, in the form of carbonic acid, from venous blood. This gas is accordingly found in the air which is expired from the lungs; and the blood having lost its carbonic acid, at the same time loses its dingy hue, and acquires the florid red which characterizes arterial blood. It has been shown by Dr. Stevens that a peculiar attraction exists (not chemical) between oxygen and carbonic acid, which acts through membranes, and in consequence of which the carbonic acid appears to be attracted, as it were, out of the venous blood, by the oxygen of the air in the cellular structure of the lungs; while, at the same time, a portion of oxygen, probably equal in bulk to that of the emitted carbonic acid, is absorbed by the blood, and contributes to its arterial

character. The change from the arterial to the venous state, and consequently the formation of carbonic acid, appears to take place in the capillary junctions of the artery and vein; but how it is there effected we know not."

Dr. William Turner, in the fourth edition of his valuable manual, "The Elements of Chemistry" (pp. 902, 3, 4), says—

"A new theory of arterialization has been lately advanced by Doctor Stevens in his valuable Treatise on the Blood. According to that physician, the colouring matter of the blood is naturally very dark: it is rendered still darker by acids: it acquires a fluid red tint from sea salt, and generally from the natural salts of the alkalies. The colour of arterial blood is ascribed by him to hæmatosine reddened by the salts of the serum, the venous character to the presumed presence of carbonic acid, which, like other acids, darkens hæmatosine, and the conversion of venous into arterial blood to the influence of the saline matter of the serum being restored by the separation of carbonic acid. The removal of this gas is ascribed to oxygen, which is said to draw out the carbonic acid by virtue of '*a latent power of attraction.*' Laying out of view the supposed latent attraction, as an unnecessary, not to say unphilosophical supposition, the views of Dr. Stevens are founded on facts which are novel and important. Take a firm clot of venous blood, cut off a thin slice, and soak it for an hour or two in repeatedly renewed portions of distilled water; in proportion as the serum is thus washed away, the colour of the clot deepens, and when scarcely any serum remains, the colour by reflected light is quite black. In this state it may be exposed to the atmosphere, or a current of air may be blown upon it, without any change of tint whatever;

whence it follows that when a clot of venous blood moistened with serum is made florid by the air, the presence of the serum is essential to the phenomenon. The serum is believed by Dr. Stevens to contribute to this change by means of its saline matter; for when a dark clot of blood, which oxygen is unable to redden, is immersed in a pure solution of salt, it quickly acquires the crimson tint of arterial blood, and loses it again when the salt is abstracted by soaking in distilled water. The alternating tint of venous and arterial blood may thus be imitated by a solution of salt.

“Such are the principal facts noticed by Dr. Stevens. Some observers seem inclined to dispute them; but they are admitted by Mr. Prater in a late Treatise on the Blood, which has just fallen into my hands, and in a careful repetition of the experiments I obtained similar results. In order, however, more fully to elucidate this point, the following experiment was performed:—With the assistance of my friend and colleague, Mr. Quain, I collected some perfectly florid blood from the femoral artery of a dog; and on the following day, when a firm coagulum had formed, several thin slices were cut from the clot with a sharp penknife, and the serum was removed from them by distilled water, which had just before been briskly boiled and allowed to cool in a well-corked bottle. The water was gently poured on these slices, so that while the serum was dissolved, as little as possible of the colouring matter should be lost. After the water had been poured off, and renewed four or five times, occupying in all about one hour, the moist slices were placed in a saucer at the side of the original clot, and both portions shewn to several medical friends. They all, without hesitation, pronounced the unwashed clot to have the perfect appearance of arterial blood, and the washed slices, on being immersed in a solution of salt, instantly acquired a similar tint. In thus brightening a dark clot by a solution

of salt or a bicarbonate, the colour is often still more florid than that of arterial blood; but the colours are exactly alike when the salt is duly diluted.

“I am at a loss to draw any other inference from the foregoing experiment than the following:—That the florid colour of arterial blood is *not* due to oxygen, but, as Dr. Stevens affirms, to the saline matter of the serum. The arterial blood which was used had been duly *oxydised*, as it is called, within the body of the animal, and should not, in that state, have lost its tint by mere removal of its serum. The change from venous to arterial blood appears, contrary to the received doctrine, to consist of two parts essentially distinct: one is a chemical change, essential to life, accompanied by the absorption of oxygen and evolution of carbonic acid; and the other depends on the saline matter of the blood, which gives a florid tint to the colouring matter, after it has been modified by the action of oxygen. Such appears to be a fair inference from the facts above stated; but being drawn from very limited observations, it is offered with diffidence, and requires to be confirmed or modified by future researches.”

A further testimony to the value of these discoveries is borne by a critic in the “Quarterly Review,” published in December, 1832; and who was, we believe, at that time the Vice-President of the College of Physicians. He concludes his paper with the following emphatic, and, in one sense, prophetic remark:—“Twenty years hence, if we be not greatly mistaken, Dr. Stevens will be honoured as the author of one of the most important works in the medical literature of our age; nay, we are scarcely afraid to add, as the patriarch of an era in medical treatment.”

M. Müller, Dr. Copland, Dr. Prout, and many other authors have also borne testimony to the importance of the facts on which Dr. Stevens' views of the blood were founded, and the latter, who, it is to be regretted, has lately been lost to mankind, in some remarks on a paper by Dr. Stevens on the blood, read before the College of Physicians, pronounced it to contain "the germs of discoveries of the last importance to mankind."

Dr. Stevens' views of the condition of choleraic blood have been extensively corroborated. Among others, Dr. W. B. O'Shaughnessy, describing in a letter to the editor of the "Medical Gazette," of date December 29th, 1831, the results of his experiments on the blood of Cholera patients, says—"It has lost a large proportion of its neutral saline ingredients. Of the free alkali contained in healthy serum, not a particle is present in some Cholera cases, and barely a trace in others. All the salts deficient in the blood, especially the alkali or carbonate of soda, are present in large quantities in the peculiar white ejected matters."* Drs. Russell and Barry, in a paper on the nature and treatment of Cholera,

* Dr. O'Shaughnessy describes these observations as made during certain experiments on choleraic blood, performed by himself at Sunderland in 1831. Had they been framed from a careful reading of Dr. Stevens' paper on the blood, which appeared in 1830, they could not have tallied with it more substantially, nor even literally.

drawn up by them and circulated by the General Board of Health in December, 1831, say, speaking of the state of the blood in Cholera patients—
 “The blood ceases to circulate ; its physical properties are altered ; its serous portion is suddenly thrown out upon the intestinal mucous surface of the body ; the secretions are all arrested, and animal heat is no longer produced.”

CHAPTER IV.

TREATMENT.

THE saline treatment in Yellow Fever was based on supplying the lost saline ingredients to the blood by imparting to the lacteals and absorbents of the stomach, and the whole of the internal intestinal surface in an aqueous medium, abundance of those electric ingredients. The evacuation of the serum occasions great thirst, and the saline agents readily enter the circulation, mix with, and become part of the blood. The saline portion of the blood is the natural stimulus of the heart, and hence the active non-purgative salts decidedly add to its stimulating power, and when given early in active doses, by increasing the stimulating power of the vital fluid, enable it

to act with more force on the vascular organs, and in this way rouse the patients from the torpor in which they generally die.

The saline remedies employed by Dr. Stevens in the Yellow Fever were chiefly solutions of muriate of soda and nitrate of potass, and the result was most satisfactory. In the Island of Trinidad alone, from 1828 to 1832, there were upwards of 1,000 cases of Yellow and other West India fevers treated on the saline plan, with only eleven deaths, and of these, three were not justly ascribable to failure of the treatment, the patients having succumbed to other causes of death than the fevers for which they were treated.

The similarity observed in the alteration of the blood in Cholera and Yellow Fever induced Dr. Stevens to believe that the non-purgative saline medicines were most likely to be useful in Cholera; for they not only redden the colour of the blood, but by increasing its fluidity and adding to its stimulating power, render it better fitted to serve the important functions which it is intended to perform in the system.* Hence also he concluded that the first effort towards a cure should be directed to assist nature in throwing off

* Communicated by Dr. Stevens to the public in a letter to the Editor of the "Medical Gazette," published 5th September, 1831.

the poisonous decomposed blood *per vias naturales*, and at the same time supplying the necessary saline stimuli on which the action of the heart and its vessels depends. It is not only necessary to expel the poison, but the normal state of the blood must be restored if the treatment is to succeed in saving the patient.

The following is an outline of Dr. Stevens' saline treatment as adopted on a large scale in the prison of Coldbath-fields in 1832, under its author's personal superintendence as well as by the medical officer of the gaol. Patients presenting merely the first stage of premonitory symptoms, diarrhœa and vomiting, were removed into an observation ward, where an even temperature was kept up by night and day, and great attention was paid to ventilation and cleanliness. On their admission a seidlitz powder was administered, and if sinking was felt, but without bowel complaint, more active purgatives were employed; three or four teaspoonfuls of Epsom salts were added to the seidlitz powder. On the bowels being moved, plenty of thin beef tea, well seasoned with salt, was given; if much irritability of the stomach prevailed, a sinapism was applied to the gastric region, and thirst was relieved with seltzer, soda, or pure water *ad libitum*. This simple treatment was so successful that 24 out of

25 patients had no further complaint, and were generally dismissed cured in a few days.*

If cramps, coldness, or sinking prostration were present, the patients were considered as Cholera cases in the second stage. The non-purgative salts were administered every half-hour, or more or less frequently, according to the severity of the symptoms, and in the following dose:—Muriate of soda, \mathfrak{z} j.; carbonate of soda, \mathfrak{z} ss.; chlorate of potass, gr. vij. When irritation of the stomach was very severe, a large sinapism was applied; and when the patient complained of heat or burning at the stomach, an additional quantity of the carbonate of soda was added to the saline powder.

In cases where life seemed rapidly ebbing, the collapse stage having been reached, a strong solution of the same salts, at a temperature of 100 degrees, was ejected into the bowels. In extreme cases of collapse, this latter method succeeded far better than injection of the electric salts into the veins. The saline mixture was administered

* It must be borne in mind, however, that none of these patients were accounted as Cholera cases in the journals of the prison. At one time during the first eruption there were about 80 prisoners suffering under premonitory symptoms, and of whom not more than one in twenty-five were taken into the Cholera wards. Mr. Chesterton, the Governor of the gaol, states that in one day during the second irruption, about 100 of the prisoners were simultaneously attacked.

half-hourly; and in severe cases the muriate of soda was increased to a drachm, or even more, as circumstances seemed to require. When the stomach was extremely irritable, it was found that the carbonate of soda given by itself, or the tartrate of soda, in a state of effervescence, was the most effective remedy that could be employed for allaying the irritation, so as to enable the stomach to retain the stronger salts. The first object was to remove the excess of acidity in the stomach, as the cause of the intense burning and local irritation—amounting even to inflammation, and originating the gastro-enterite of Broussais. This species, however, of the enterite cannot be cured either by gum-water, taken internally, nor by leeches applied to the pit of the stomach. The irritation is produced by a chemical cause, and can only be removed by chemical means. At this period of the disease the alkaline carbonates are of infinite value; for example, by exhibiting the carbonate of soda, the fixed acids of the stomach are immediately neutralized. A large quantity of carbonic acid is evolved by the mouth, and the irritation of the stomach disappears almost as fast as if it had been removed by a charm. The fixed acids are immediately neutralized by the alkali of the carbonate; the muriate of soda and the other natural salts of the blood are instantly formed in the stomach itself and enter the circulation; that

is, they mix with and become a part of the circulating blood, changing its properties and remedying its morbid condition, thereby restoring the stimulating power of the circulating current, and so enabling the heart and all the capillary vessels to keep up their action.

The enema exhibited and found so valuable was composed of a large tablespoonful of muriate of soda dissolved in warm water, sometimes with the addition of sugar or starch, and it was administered every three or four hours at as high a temperature as the patient could well bear. Sinapisms were also applied as early as possible to the region of the stomach, betwixt the shoulders, &c., and in the cold-stage frictions were frequently used with warm towels.

In the instructions to the profession and the public issued by the Board of Health in 1831, Drs. Russell and Barry thus described the mode of treatment recommended by them—"When the diarrhœa affords time for distinct treatment, it ought to be arrested at once by the most prompt and efficient measures, by opium in moderate doses, astringents, local bleeding by leeches, if the subject be plethoric, by cordials and sulphate of quinine, if there be cold sweats, by confining the patient strictly to bed, and keeping up heat by diet, by emetics." And in severe cases they said—"Should no medical person be at hand, let

the patient be then immediately placed betwixt warm blankets, then let two tablespoonfuls of common kitchen salt be dissolved in six ounces of warm water and be given immediately *and at once* if he be an adult." And from their imagining that a softened state of the spinal cord was the cause of the disease, they recommended the actual cautery to be freely applied on one, two, or more places on each side of the spine.

The warm water and salt mixture, it has been observed by Dr. Turley,* is an excellent remedy for the distemper in dogs, and "firing" is often applied to horses; but the intelligent persons who administer those remedies to the "brute creation" probably never dreamt of their being patronised by the General Board of Health, and recommended by it in the treatment of a disease incident to man. Their mode of treatment was condemned by the more intelligent as empirical, although, unhappily, it was generally adopted. Practitioners who reasoned on the subject could not fail to see that it was absurd to prescribe medicines to lock up the Cholera poison in the body, at the same time with emetics to eject it, nor could even the very sanguine entertain much hope in burning it out of the blood with a hot poker! Then, as to the recommendation to employ cordials, by which

* Correspondence with Mr. George Ross in "Medical Times," 1849.

hot brandy and water in unscrupulous doses was understood, the effect was most disastrous. Under the stimulating system the mortality was highest, with the exception, perhaps, of the combinations of calomel and opium and stimulants, when the mortality was literally murderous. Mr. Ross says*—"What benefit can attend the propulsion of a quantity of thick, grumous, black blood into the capillaries of the internal organs, even supposing no other mischief were produced? Then, again, the large quantities of diffusible stimuli, upon which so much reliance has been placed, actually consume the oxygen of which the blood has so much need! What advantage could there be in making a man drunk with brandy who is dying of the universal congestion of Cholera? The undue attempt to rouse the nervous system must certainly exhaust its powers; and the principle upon which the largest amount of stimulation has been applied to the lowest amount of vital power is as false as any paradox the human mind can conceive. Can we, then, be astonished at the high rate of mortality?" And Mr. Marsden, in his "Treatise on Cholera," says of the Board's treatment—"During the existence of the disease in 1832, the directions for treatment, professional and domestic, issued by the Board of Health are founded solely on empirical principles, yet, not-

* Lectures on Cholera, "Medical Times," November, 1848.

withstanding these erroneous measures, all might have been rectified had the Board at the time, with every facility for so doing, proceeded to a public and impartial investigation of the nature and treatment of the malady."

CHAPTER V.

THE CHOLERA IN COLDBATH-FIELDS PRISON.—FIRST VISITATION, APRIL 5—MAY 11, 1832.

THE Cholera first appeared in Coldbath-fields prison on the 5th April, 1832, on which day there were confined there 824 males, 294 females, and 9 children, making the total number of prisoners 1,127. It broke out in the male vagrants' ward, into which had been received a short time previously some persons from St. Giles's parish, and other districts of the metropolis then infected with Cholera. Perhaps so awful an enemy of human life could not have been encountered on any field more unfavourable for the curative means employed, although the unfavourable circumstances here referred to were the usual sanitary conditions of all similar institutions of that day. The prison was deficient in drainage; its sewers, such as they were, were obstructed and

foul ; and its ventilation imperfect. The prison discipline, also, tended to aggravate the severity of many of the attacks ; for it is a feature in this dreadful disease that it supervenes oftener between midnight and the earlier hours of morning than at any other period of the day. During those hours the inmates of the prison were, as a matter of course, confined in cells, and unable to communicate with the officers of the gaol, even if seized with a sudden attack. The consequence was that many patients attacked while locked up had attained the last stage of the disease before their removal from the cells to the infirmary could be accomplished. And this happened, as was not unlikely to be the case, even after the humanity of the Visiting Magistrates and of the Governor and other officers of the prison had directed that special attention should be paid to the infected quarters of the gaol during the hours of confinement.

The Visiting Magistrates, the Governor, and the officers of the prison were soon exceedingly alarmed at the threatening nature of the visitation, and with little wonder. Mr. Chesterton, the talented and humane Governor, stated, in a letter published July 25th, 1832, the progress of the malady in the prison as follows :

“In ordinary times, at this season, the infirmaries were vacant, and the prisoners healthy ; while, on this occasion, in every part of the prison, and at all hours of the day and

night, to the destruction of the rest of my officers, who were harassed to death, were we called to some unhappy being, seized with diarrhœa and vomiting, but most frequently the latter, *to the number, at one period, exceeding 100*. Many of these could not be removed so speedily ere they exhibited the extreme symptoms of this awful malady; and who could tell how soon the slightest case, if for the shortest period neglected, might not terminate in death? Here was no deception or collusion; for my chief officer, a man of principle and veracity, can vouch that cell after cell was nightly drenched with the fluid rejected from the stomachs of their inmates, many of whom were likewise violently affected by cramp."

The habits of life of many of the prisoners—probably, indeed, of the majority—rendered them little able to encounter the attacks of such a disease, and their numbers, compacted as they were in so small a space, presented additional facilities for its ravages. During the period of the prevalence of Cholera, the average number of inmates in Coldbath-fields was about 1,200, and that the field which its cells presented for the ravages of the disease was very ample must be apparent from the following facts. The number of prisoners in the gaol on the 5th April, when the disease broke out, was 1,127, and the total number of commitments from that day up to Dec. 31st, 1832, when it ceased, was 9,424. The commitments during this period, Mr. Chesterton states, were more numerous, and consequently

the prison was more crowded, than during a similar period of any year since he became Governor. It appears also, from the Prison Journal, that of 97 patients who were in the infirmary suffering under various diseases on one day, viz., the 17th of April, no less than 73 were Cholera patients. Such a fact speaks volumes as to the virulence of the attack, but it was fully warranted by the conditions of the prison, and the extent and nature of the fuel presented to the ravages of Cholera.

Dr. Stevens' treatment was introduced into Coldbath-fields prison immediately on the appearance of the disease in April by Mr. Henry Wakefield, the Surgeon of that institution, but, at his request, its practice there was very soon after the commencement of the disease personally superintended by the discoverer, who continued his assistance in combating the disease in that prison with some intermissions till about the end of August. Dr. Stevens availed himself of the able assistance of a gentleman named Crook, who had been professionally engaged with him in the Island of St. Thomas, and had enjoyed extensive opportunities of witnessing the results of the saline treatment in West India Fevers. This gentleman resided in the prison purposely to ensure the utmost degree of carefulness and accuracy in the application of the treatment—it

having been found that the least intermission of the medical attendant's care proved fatal; and Mr. Wakefield, Dr. Stevens, and Mr. Crook were thus associated in the arduous task of overcoming a severe outbreak of this tremendous disease in circumstances as unfavourable as can well be conceived. Had the Board of Health treated the result of their labours in the prison as its great importance warranted, by according an honest and impartial inquiry to the Cholera in Coldbath-fields, as Mr. Marsden has said, all would have been well: instead of that, however, it will appear in the sequel that the Board contented itself with a mere sham inquiry, occupying less time than is devoted by a Police Magistrate to the investigation of a street brawl, and conducted in a manner so one-sided, flippant, and superficial, as to arouse the indignation of the Visiting Justices, the Governor, and all who beheld it.

The nature of the saline treatment as applied in Coldbath-fields has been indicated above—how magically it succeeded will be seen by the following letter to the Editor of the “Medical Gazette,” written by the Surgeon of the prison :

“Lansdowne-place, Brunswick-square,

“April 25, 1832.

“Sir,—So much has already been written on the subject of Cholera, that I should not now appear before the public but from a conviction that the facts which I am about to

state, if generally known and properly authenticated (which they can easily be), must be useful to those of the profession who in future may be called upon to treat this new, but most malignant disease. The first case which I saw occurred on the 5th of this month, in the prison at the Coldbath-fields. Three others quickly followed, and were immediately put under the common treatment; these four patients died, after a short illness, with all the symptoms of Cholera distinctly marked. Soon after the commencement of the disease, a number of the prisoners were attacked with marked symptoms of derangement in the gastric organs; and as all of these cases occurred in the infected part of the prison, it is more than probable from this, as well as the general appearance of the patients, that the diarrhœa with which they were attacked, was the effect of the poison which produces Cholera. From having seen similar cases in the commencement transformed rapidly into a state of collapse, my conviction is that every one of those patients was more or less in serious danger; and I believe also that had they either been left to themselves, or improperly treated, the majority of these cases would have run into a state of collapse, perhaps in a few hours; indeed, I have little doubt, that the one-half of them would have been lost under the practice which is generally adopted in the treatment of this disease. Independently of the numerous cases where the individuals were labouring under the premonitory symptoms, I have now had 25 cases of decided Cholera, where the patients were in a state of collapse; and in justice to Dr. Stevens, who suggested the use of the saline remedies, as well as from a sense of what I owe to the public, I conceive it my duty to state, that after having seen both the old and the new treatment fairly put to the test, *I am fully convinced that the saline practice is not only the most scientific, but decidedly the most successful that has yet been adopted for the*

cure of Cholera; and from what I have seen, my conviction is, that if this treatment be fairly and extensively tried, the mortality from Cholera will be greatly diminished. When used at an early period, it either prevents or arrests the progress of the fatal symptoms; or even where this treatment is not used until a later period of the disease, its effects are distinctly marked; and I may safely say that I have seen several most malignant cases recover from a state of collapse under the saline treatment, where the patients, I doubt not, would have died under any other practice. We have now upwards of twelve hundred persons in this prison; and from the commencement of the disease, up to this date, there have been nearly a hundred cases where individuals have been more or less evidently labouring under the influence of Cholera poison. Twenty-five of these assumed the malignant character of the disease, having the majority of the symptoms described in the printed document issued by Dr. Macann. Four of the first cases, as before observed, were treated in the common way, and every one of them died. All the others, however, were immediately put under the use of the saline practice, as recommended by Dr. Stevens, and out of the whole number who have been thus treated, we have only had three deaths from Cholera, and two of these were cases of relapse. I may state, also, that within the last few days, I have had one most malignant case in the New Prison at Clerkenwell, where the patient was in a state of complete collapse before I saw him. His extremities were cold; his pulse at the wrist was entirely gone; he had the Cholera voice, and his tongue was icy cold. This man, like those in the other prison, was immediately put under the saline treatment with the happiest effects, and I consider him now in a state of convalescence.

“I am, Sir, your humble Servant,

“H. WAKEFIELD.”

The medical management of the prison in Cholera cases has been already indicated above ; here we may repeat that patients who presented simply the first stage of the disease—purging and vomiting, were treated as labouring under premonitory symptoms, and placed in an observation ward. They were very numerous ; but it was only where the symptoms exhibited the second stage of the disease, the symptoms being purging, vomiting, spasms, sinking pulse, and coldness, that the sufferer was considered a Cholera patient. In point of fact, all attacked with the symptoms of either stage were Cholera patients ; and it is a high merit of the new treatment that it arrested the disease in nine cases out of ten on the threshold, and, by aiding nature, expelled the active poison which proved so fatal when left in the system by inert treatment, or from being locked up in it by such treatment as that recommended by the Board of Health. The Board of Health, however, seem to have resolved to accept nothing as Cholera except those cases in which the patients had reached the collapse stage, which is as absurd as to assert that syphilis cannot have existed in a patient, unless it be proved by a bridgeless condition of the nose, or the loss of the palate.*

* On the 29th June, Mr. Wakefield received an order from the Privy Council to report to them only the collapse cases happening in the prison.

From documents* preserved in the prison the following cases are inserted as illustrations of the practice. Scott's case was among the first treated by Dr. Stevens personally :

"April 11th.—John Scott, age 26, was admitted into the infirmary with the following symptoms : pulse 82 ; full and hard ; tongue white in the centre, and red at the edges ; considerable pain in the stomach and abdomen ; some degree of nausea ; says he has not had an evacuation the last four days ; ordered a seidlitz powder, and warm applications to the belly.

"12th.—The pain in the belly continues, accompanied with some irritability of the stomach. Let him have another seidlitz powder, and continue the warm applications.

"13th.—Patient has passed a very good night ; is quite free from pain ; says he has an appetite ; let him have tea and toast ; his bowels are sufficiently open ; says he would prefer being among the convalescents ; was therefore sent from the infirmary to the convalescent ward this morning. Ten o'clock p.m. ; is sent back to the infirmary very ill ; his extremities are cold ; cramps ; pulse nearly imperceptible ; Cholera voice ; great pain and tenderness in the abdomen ; stomach irritable ; rice water evacuations ; ordered a large mustard plaster to the stomach and abdomen, and warm applications to the extremities, and a saline powder every hour.

"14th.—Patient is in a perfect state of collapse ; skin livid, and of an icy coldness ; tongue and breath cold ; pulse

* Journal of cases kept by a prisoner, named Lonegan, employed to assist in keeping the Surgeon's journal, and also as a nurse. This man had received a competent education, and took a great deal of interest in his hospital occupation.

imperceptible ; incessant vomiting ; cramp ; griping pains in the bowels ; his evacuations are passed involuntarily ; repeat the mustard plasters ; give him oxymuriat. potass. gr. viij. every half-hour ; and let him take occasionally a little soda water, toast water, or hot brandy and water.

“ 15th.—Is better to-day ; his skin is warm, and he is free from pain, and feels tolerably easy, but still has some degree of nausea ; pulse feeble ; has passed a small quantity of urine ; continue all the remedies, and give him one-third of a seidlitz every half-hour.

“ 16th.—Continues to improve ; let all the remedies be persevered in, and give him a seidlitz powder in the same way as yesterday.

“ 17th.—The patient is much better ; is able to sit up in bed, though excessively weak. From this time he recovered his strength very fast ; his evacuations daily improved, and he was ultimately discharged cured.”

“ April 14th.—James Tunbridge, aged 17 ; admitted to-day. Is of very delicate habit ; complains of great pain in his belly, pain in his stomach, and very great debility. His bowels have not been open for several days. Let him take a seidlitz powder, and apply a mustard plaster to his stomach.

“ 15th, eight, a.m.—The pain in his stomach is relieved, but the pain in his belly rather severe. The seidlitz powder has not sufficiently operated. Let him have an injection (saline), and apply a mustard plaster to the belly. Nine p.m. Appears a little relieved ; says his feelings are much better ; let him have a little sago or tapioca.

“ 16th, eight, a.m.—Has passed a very restless night ; his bowels are not sufficiently open ; complains of pain in his belly, and slight nausea ; give him a seidlitz powder, and an injection an hour after ; should the powder not operate, apply warm flannels to the belly.

"17th.—The patient has passed several evacuations of a very suspicious kind; let him take a saline powder every hour, and give him soda water as a common drink, and continue the warm applications.

"18th.—The patient complains of pains in his belly, accompanied with some degree of nausea; says he feels excessively weak; let him continue the saline remedies; give him occasionally a little hot brandy and water.

"19th, eight, a.m.—Is extremely ill; extremities cold; pulse imperceptible; an almost total loss of voice; stomach extremely irritable; incessant vomiting; rice water evacuations; cramped violently; considerable pain and tenderness in the abdomen; great thirst and prostration; shrinking, and some degree of lividity of the surface; ordered frictions with hot flannels. A large mustard plaster to the stomach and abdomen; give an injection (saline) every two hours; and let him take oxymur. potass. gr. viij. every half-hour.

"One, p.m.—Patient continues in a perfect state of collapse. Continue the remedies.

"Ten, p.m.—Still continues in the same way; persevere in the remedies, and let him have soda water, hot brandy and water, or toast and water.

"20th, eight, a.m.—Patient appears to be sinking rapidly. Apply sinapisms to the feet, let him have pulv. carb. sod. ʒi. ; aq. pur. viij.; cap. coch. pulv. pro re natâ. Warm applications to the belly.

One, p.m.—Has rallied a little; the sinapisms were removed fifteen minutes after their application; pulse barely perceptible; let him continue the solution of carb. sod., as he is able to retain it. Apply warm flannels to the arms and legs, &c.

"Ten, p.m.—Appears a little improved. Continue the same remedies; rice water evacuations still frequent. Con-

tinue the remedies, and let him have a little sago with brandy.

“One, p.m.—Is precisely in the same state as this morning. Let him be kept warm, and continue the remedies.

“Ten, p.m.—His extremities are cold; cramps have returned, but not so violent; pulse almost imperceptible; apply sinapisms to the feet, thighs, and arms, and when removed apply warm flannels, and continue the solution of soda, also the saline injections.

“22nd, eight, a.m.—Patient is rather better this morning; his skin is warm; pulse feeble; says he feels comfortable; his stomach is now quiet; persevere in the use of the saline remedies, and let him have some soda water occasionally.

“23rd.—The patient is considerably better; says he feels in every respect comfortable; let him have some sago, or weak tea.

“24th.—From this date the patient continued to do well, until the 13th of May, when he was seized with fits, which caused his death on the following day.

“In this case it may be well to remark that *every symptom of Cholera had in this case been subdued long previous to the attack of fits*; but that the natural weakness of the patient's constitution accelerated his death.”

The first visitation of the disease to the prison lasted from the 5th of April to the 11th of May, and the following are details of the number of cases treated as Cholera patients labouring under the second or third stages of the disease.

From the outbreak of the disease in the prison till Dr. Stevens was called in there were 28 cases, viz.:

April 5	...	...	...	...	...	...	1
„ 6	...	...	...	...	...	...	6
„ 7	...	...	...	...	...	...	2
„ 8	...	...	...	...	...	...	7
„ 9	...	...	...	...	...	...	12
Total							<hr/> 28

From the time that Dr. Stevens undertook the care of the Cholera patients till he left off visiting the hospital on the 30th April there were 121 cases, viz. :

April 10	...	...	...	...	...	...	3
„ 11	...	...	...	...	...	...	15
„ 12	...	...	...	...	...	...	15
„ 13	...	...	...	...	...	...	6
„ 14	...	...	...	...	...	...	12
„ 15	...	...	...	...	...	...	11
„ 16	...	...	...	...	...	...	10
„ 17	...	...	...	...	...	...	8
„ 18	...	...	...	...	...	...	18
„ 19	...	...	...	...	...	...	1
„ 23	...	...	...	...	...	...	6
„ 24	...	...	...	...	...	...	5
„ 25	...	...	...	...	...	...	5
„ 26	...	...	...	...	...	...	4
„ 28	...	...	...	...	...	...	1
„ 29	...	...	...	...	...	...	1
Total							<hr/> 121

And during the period from his ceasing to attend the prison until the end of the first

visitation of the epidemic, there were 16 cases, viz. :

May 1	...	...	...	...	...	...	3
„ 3	...	...	...	...	...	...	3
„ 4	...	...	...	...	...	...	1
„ 6	...	...	...	...	...	...	5
„ 10	...	...	...	...	...	...	3
„ 11	...	...	...	...	...	...	1
Total							<hr/> 16

The result of these three periods was an aggregate of 165 cases, viz. :

From April 5th	to 9th	...	...	...	28
„ 10th	„ 30th	...	...	...	121
May 1st	„ 11th	...	...	...	16
Total					<hr/> 165

Of these 165 cases the following were admitted in a state of collapse or speedily reached that gloomy stage of the disease :

COLLAPSE CASES.

April 5	...	...	...	...	...	...	1
„ 6	...	...	...	...	...	...	4
„ 8	...	...	...	...	...	...	6
„ 10	...	...	...	...	...	...	5
„ 12	...	...	..	...	...	...	1
„ 13	...	..	...	...	...	...	5
„ 14	...	...	...	...	...	...	2

April 16	...	.	...	...	...	...	6
„ 17	...	...	...	...	...	...	3
„ 18	...	...	...	..	...		1
„ 23	...	...	...	...	...	...	1
„ 24	...	...	...	...	...	...	1
„ 25	...	...	...	...	...	...	2
„ 28	...	...	...	...	...	...	1
Total							39

The deaths from Cholera in the prison from April 5th to May 11th were as follows :

April 5	...	...	...	...	...	...	1
„ 9	...	...	...	...	...	...	1
„ 11	...	...	..	...	...	...	1
„ 12	...	...	...	...	...	..	1
„ 15	...	...	...	...	...	...	1
„ 16	...	...	...	...	...	..	1
„ 20	...	...	...	...	...	...	1
„ 24	...	...	..	...	...	...	1
May 14	...	...	...	...	...	...	1
Total							9

But those nine deaths would be very unfairly and incorrectly charged against the saline treatment, for the following reasons:—In the first place, early in April, when the disease broke out in the prison, four patients were treated on the Board of Health plan, viz., by opium and stimulants, and all of them died; in two cases death ensued from the effects of too early a

removal from the infirmary, in consequence of the limited extent of its accommodation. Mr. Wakefield's authority for these two deductions from the mortality appears in page 31; and in regard to two more of the deaths, although both patients had suffered from Cholera, yet one died of fits long after the Cholera had been entirely subdued; and the other died from the effects of a typhoid fever on a worn-out frame.

Eight out of the nine deaths are thus accounted for, leaving as the result of the saline treatment in Coldbath-fields prison during the first visitation 159 cases of well marked Cholera, including 33 cases of collapse, with one death, or a total mortality of less than one per cent.

The reader will bear in mind that these facts—no matter how astounding they may seem when compared with the results of the Board of Health's treatment, and indeed of every other but the saline—stand recorded in the journals of the prison in which they occurred; and that this statement has been drawn up from those records. It is not astonishing in such circumstances to find that the prison authorities should have expressed in the most marked manner their obligation to the individual who had been the means of so beneficial a result.

Accordingly we find that Mr. Sterling, Clerk to the Visiting Justices, on the 11th May, 1832,

wrote to Dr. Stevens, informing him that he had been officially directed to state that—

“The Visiting Justices consider that, in the due exercise of the duties entrusted to them, they ought, in their next report to the Magistrates at large, to state distinctly the benefits which have been received by means of your kindness and medical skill, and to trust that the Magistracy will present you with their thanks and the sum of £100 in testimony of that gratitude on their part which is so justly your due.”

Nor did the Magistrates neglect the eminently useful services of Mr. Wakefield and Mr. Crook : they requested Dr. Stevens to inform them what amount of pecuniary recompense he would recommend to be conferred on Mr. Crook. Dr. Stevens at once declined all pecuniary recompense for himself, and also acquainted the Magistrates that he did not believe that any would be accepted by Mr. Crook. After receiving a communication from Dr. Stevens to this effect, the Magistrates resolved to present him with a piece of plate of the value of the proposed pecuniary reward, and the following resolution was transmitted to him by their Clerk :

“And the Visiting Justices recommend to the Court that a piece of plate, of the value of £100, should be presented to Dr. Stevens, with the thanks of the county, and the occasion of its being presented be engraven thereon ; and that a piece of plate, to the value of £25, be presented to Mr. Crook on the like account.

“And, in consideration of the extraordinary labour and services rendered by Mr. Wakefield during the prevalence of the Cholera, the Visiting Justices resolve that £50 be presented to him in a piece of plate.

“Resolved, that the several sums of £100, £25, and £50, be presented to Dr. Stevens, Mr. Crook, and Mr. Wakefield, in pieces of plate, in conformity to the recommendation of the said Visiting Justices; and that the Clerk of the Peace be, and is hereby authorised to issue orders on the County Treasurer for those several sums.”

The County Magistracy having cheerfully concurred in the recommendations of the Visiting Justices, handsome pieces of plate, with suitable inscriptions, and votes of thanks from the county of Middlesex, were accordingly presented to Dr. Stevens, Mr. Wakefield, and Mr. Crook, and so terminated the proceedings connected with the first attack of Cholera in Coldbath-fields prison.

CHAPTER VI.

NOMINAL ENUMERATION OF THE CHOLERA PATIENTS IN COLDBATH-FIELDS, APRIL 5—MAY 11, 1832.

THE facts connected with the outbreak of the Cholera in Coldbath-fields may perhaps appear to have been stated with a sufficient degree of circumstantiality; but, in order to prevent any doubt of the truth of the narrative, we add the name, date of attack, and mode of treatment of

all the patients who suffered from the Cholera in its second or third stages. The reason for being thus minutely particular will be found explained in the progress of the statement, and is mainly founded on the extraordinary conduct of the Board of Health, which proceeded to such a length as amounted almost to a denial of the pestilence having been experienced in the prison.

Unhappily it will be found that this extraordinary attempt to ignore the very existence of Cholera—at all events in a degree worth notice—in Coldbath-fields, was but too successful in preventing the general adoption of the saline treatment. This conduct succeeded, in 1832, in casting a grave shade of suspicion upon the truth of the statements which had appeared of the splendid success of the treatment in that prison; and as it was there that it had first been applied on a great scale, the proceedings of the Board of Health were calculated to extinguish the reputation of the treatment at its fountain head. That that malignant influence has continued to the present day will be found in the sequel to be abundantly proved, and especially in a remarkable instance connected with the history of the Cholera hospital in Worcester, in 1849. Hence, as the reader must see, the necessity that exists for imparting to this subject the utmost degree of circumstantiality, even at the risk of tediousness.

Enumeration of all the Patients in the House of Correction, Coldbath-fields, who suffered from the second or third stages of Cholera, from the 5th of April to the 11th of May, 1832, exhibiting the dates of attack, collapse, or death, and distinguishing the mode of treatment in each case. The deaths are distinguished by the letter D, and the date when the patient died, added to the name within brackets, as "J. Summers (D. April 6)"; in all the rest the patients recovered.

Name of Patient.	Date of Attack.	When Confirmed or Collapsed.	Treatment.
J. Summers } (D. April 6) }	April 5	April 5	Opium and brandy
G. Pickering.....	" 6	" 6	Saline
J. Corderoy	" 6	" 6	ditto
R. Chlory	" 6	" 6	ditto
J. Leach	" 6	.....	ditto
T. Jefferey..... } (D. April 9) }	" 6	" 6	Opium and brandy
Anthony Welsh ...	" 6	" 14	Saline
T. Clements	" 7	.....	ditto
James Jerman	" 7	.....	ditto
T. Bushford	" 8	" 8	ditto
John Dyer	" 8	" 8	ditto
John Puffey	" 8	" 8	ditto
E. Rowley	" 8	" 8	ditto
J. Wight	" 8	" 8	ditto
J. Westbrook	" 8	" 8	ditto
Thos. Castle	" 8	.....	ditto
John Phillips	" 9	" 17	ditto
Wm. Place	" 9	.....	ditto
Chas. Hind..... } (D. April 11) }	" 9	" 10	Hot brandy and laudanum
Stephen Brown ...	" 9	" 10	Saline
H. Harrow	" 9	" 10	ditto
John Casey	" 9	" 10	ditto
John Harris	" 9	" 10	ditto
Joseph Burbridge...	" 9	.....	ditto
Peter Reynolds ...	" 9	.....	ditto

Name of Patient.	Date of Attack.	When Confirmed or Collapsed.	Treatment.
John Scott	April 9	April 16	Saline
Patrick Keynolds...	" 9	.....	ditto
James Hind	" 9	" 16	ditto
James Chapman ...	" 10	.....	ditto
Wm. Johnson	" 10	.....	ditto
C. Brookwell	" 11	.....	ditto
Thos. Lowrie..... } (D. April 15) }	" 11	" 12	Saline and brandy
Edward Kelly	" 11	" 13	Saline
Frederick Cook ...	" 11	" 13	ditto
W. Thompson	" 11	.....	ditto
Wm. Judd	" 11	.....	ditto
George Wells	" 11	.....	ditto
Wm. Yeats	" 11	" 16	ditto
Thos. Ward	" 11	" 18	ditto
Wm. Smith	" 11	" 17	ditto
Samuel Harrison ...	" 11	.....	ditto
Wm. Wallis	" 11	.....	ditto
— Easton.....	" 11	.....	ditto
G. Churchill.....	" 11	.....	ditto
J. Freegrove	" 11	.....	ditto
T. Tunbridge	" 11	" 25	ditto
Daniel Sullivan ...	" 12	" 13	ditto
A. Appleford	" 12	" 13	ditto
J. Wilkinson..... } (D. April 13) }	" 12	" 13	Brandy and porter
John Griffiths	" 12	.....	Saline
John Parker.....	" 12	.....	ditto
Richard Edwards...	" 12	.....	ditto
Wm. Harris	" 12	.....	ditto
Thos. Hart	" 12	.....	ditto
Charles Chapman...	" 12	.....	ditto
T. Spendlove	" 12	.....	ditto
Lewis Phillips	" 12	.....	ditto
C. Blenheim.....	" 12	.....	ditto
A. Almond	" 12	" 13	ditto
(D. April 16) }	" 12	" 13	ditto
Wm. Jones	" 12	.....	ditto
M. Horrigan	" 12	.....	ditto

Name of Patient.	Date of Attack.	When Confirmed or Collapsed.	Treatment.
George Johnson ...	April 13	.....	Saline
James Perry	" 13	.....	ditto
Daniel Greenhill ...	" 13	.....	ditto
John Shaft	" 13	.....	ditto
Henry Cann.....	" 13	.....	ditto
Wm. Stevens	" 13	.....	ditto
John Terrett..... } (D. April 20) }	" 14	April 14	ditto
Henry Ackers	" 14	" 16	ditto
Thos. Curtis.....	" 14	.....	ditto
Thos. Crouch	" 14	.....	ditto
Henry Parker	" 14	.....	ditto
Charles Dunbar ...	" 14	.....	ditto
D. Callaghan	" 14	.....	ditto
Henry Norris	" 14	.....	ditto
James Perry	" 14	.....	ditto
John Palmer	" 14	" 16	ditto
James Watmore ...	" 15	.....	ditto
M. Montrail.....	" 15	.....	ditto
K. Matthews	" 15	.....	ditto
John Garnon	" 15	.....	ditto
John Smith	" 15	.....	ditto
Wm. Dark	" 15	.....	ditto
Wm. Dibbin	" 15	.....	ditto
James Wood	" 15	.....	ditto
Wm. Davis	" 15	" 23	ditto
Wm. Dundas	" 15	.....	ditto
John White	" 15	.....	ditto
James Johnson.....	" 16	.....	ditto
Robert Ireland	" 16	.....	ditto
Wm. Smith	" 16	.....	ditto
George Ryan	" 16	.....	ditto
Wm. Murray	" 16	.....	ditto
Wm. Masbey	" 16	.....	ditto
S. Litchfield	" 16	.....	ditto
P. Harris	" 16	" 17	ditto
Francis Witney ...	" 16	.....	ditto
Luke Maddox	" 16	.....	ditto
E. T. Spires	" 17	.....	ditto

Name of Patient.	Date of Attack.	When Confirmed or Collapsed.	Treatment.
John Rees	April 17	.....	Saline
James Preston	" 17	.....	ditto
Thos. Ward	" 17	.....	ditto
James Low	" 17	April 24	ditto
G. Pickering	" 17	.....	ditto
Wm. King	" 17	.....	ditto
George Dalton	" 17	.....	ditto
F. Goodfellow	" 18	.....	ditto
M. O'Keefe	" 18	.....	ditto
George Kendall ...	" 18	.....	ditto
James Buckley ...	" 18	.....	ditto
G. Bloomfield	" 18	.....	ditto
Edward Brogden...	" 18	.....	ditto
Thos. Spicer	" 18	.....	ditto
Wm. Bradley	" 18	.....	ditto
Charles Dunbar ...	" 18	.....	ditto
John Weaver	" 18	.....	ditto
Wm. Dormer	" 18	.....	ditto
John Driscoll	" 18	.....	ditto
W. Faulkner	" 18	.....	ditto
James Child	" 18	.....	ditto
W. Dickenson	" 18	.....	ditto
Wm. Griffiths	" 18	.....	ditto
John Sharp	" 18	.....	ditto
George Kendall ...	" 18	.....	ditto
Wm. Dormer	" 19	" 25	ditto
M. Titchen	" 23	.....	ditto
John Cockbill	" 23	.....	ditto
John Hayes	" 23	.....	ditto
J. Hemming	" 23	.....	ditto
Edward Kerry.....	" 23	" 28	ditto
Wm. Davis	" 23	.....	ditto
John Parker.....	" 23	.....	ditto
W. Clements.....	" 24	.....	ditto
James Puffice	" 24	.....	ditto
John Williams.....	" 24	.....	ditto
Wm. Jones	" 24	.....	ditto
James Jerman	" 24	.....	ditto
J. Hemmings	" 25	.....	ditto

Name of Patient.	Date of Attack.	When Confirmed or Collapsed.	Treatment.
John King	April 25	.....	Saline
John Morris.....	" 25	.....	ditto
John Preston	" 25	.....	ditto
Richard Knowles...	" 25	.....	ditto
John Longdon	" 26	.....	ditto
John Smith	" 26	.....	ditto
John Harris	" 23	.....	ditto
James Taylor	" 26	.....	ditto
C. Holland	" 26	.....	ditto
John Tables	" 28	.....	ditto
Wm. Watson	" 29	.....	ditto
T. Hardwick	May 2	.....	ditto
Robert Panton	" 3	.....	ditto
T. Fairbrother	" 3	.....	ditto
J. Westbrook	" 5	.....	ditto
John Marsh	" 5	.....	ditto
James Preston	" 5	.....	ditto
Thos. Brown	" 6	.....	ditto
Samuel Francis ...	" 6	.....	ditto
Samuel Morton ...	" 6	.....	ditto
George Jenner.....	" 6	.....	ditto
James Murray	" 6	.....	ditto
John Smith	" 6	.....	ditto
Thos. Scott	" 10	.....	ditto
J. Thompson	" 10	.....	ditto
Edward Dormer ...	" 10	.....	ditto
Thos. Smith	" 11	.....	ditto
Total number of cases, 165 ; of collapse cases, 39 ; under the opium practice, 4 cases and 4 deaths ; from premature dismissal, 2 deaths ; under the saline treatment, 159 cases, 1 death, and 158 recoveries.			

CHAPTER VII.

SECOND VISITATION OF THE CHOLERA TO COLDBATH-FIELDS PRISON, VIZ., FROM JUNE 3 TO DECEMBER 31, 1832.

IT was on the 30th of April that Dr. Stevens and Mr. Crook ceased to attend the infirmary of the prison. A few dropping cases, as we have seen, happened up to the 11th May, when it appeared to have been finally expelled, but it was not so : another and more virulent attack was at hand. This second irruption broke out in the female side of the prison on the 3rd of June. The first patient, Margaret Kelly, was attacked on that day, and died on the 5th. When informed of her death, Dr. Stevens proceeded to Coldbath-fields, to ascertain from Mr. Wakefield the facts, but that gentleman was not in the prison at the time, and Dr. Stevens did not return to the prison until the night of the 21st of June, when he received information from the Surgeon that the saline treatment had at last failed, and that the Cholera was then producing a frightful destruction of life in the house of correction at Coldbath-fields. After a strict examination, Dr. Stevens found that one patient had died on

the 5th, one on the 14th, another on the 15th (both on the day of attack), and one on the 18th, also soon after admission. Three patients had died on that day, the 21st; two others were dying, and did die, either during the night of the 21st, or early on the morning of the 22nd; making in all nine deaths—and five of them within twenty-four hours. Dr. Stevens ascertained from one of the nurses that the treatment in these cases had been changed from about the 13th of the month in favour of a plan of Mr. Wakefield's own devising, the chief feature of which was, that the patients were treated with small doses of carbonate of soda at long intervals. Under this inert exhibition the sufferers perished with frightful rapidity.

Mr. Wakefield did not deny that Dr. Stevens' treatment had not been used in the fatal cases; and after a full explanation with Mr. Wakefield, and on condition that the new practice was to be applied as formerly, Dr. Stevens renewed his superintendence of the Cholera treatment in the prison early on the morning of the 22nd, and Mr. Crook again took up his abode there, resuming his active labours among the patients on the same day. The Governor of the prison, Mr. Chester-ton, who had in the cessation of the disease embraced the welcome opportunity of recruiting his health by a few days' excursion into purer

air, after the severe seclusion and anxious duties consequent upon the outbreak of Cholera, happily returned to Coldbath-fields on the 25th of June, and instantly the most active measures were adopted to cleanse and purify the wards of the prison. The good effects of this and a return to the true saline treatment were soon apparent.

The following is a statement of the daily admission of cases from the commencement of the second outbreak, June 3rd, to Dr. Stevens' return to the prison hospital :

June 3	...	...	...	1	June 17	...	...	...	4
„ 7	...	...	...	1	„ 18	...	...	...	6
„ 8	...	...	...	1	„ 19	...	...	...	2
„ 12	...	...	...	2	„ 20	...	...	...	6
„ 13	...	...	...	1	„ 21	...	...	...	4
„ 15	...	...	...	2					—
„ 16	...	...	...	2	Total	...	...	...	32

From the 22nd of June until Dr. Stevens and Mr. Crook ceased to have any connexion with the prison :

June 22	...	...	...	17	July 2	...	...	...	10
„ 23	...	...	...	5	„ 3	...	...	...	1
„ 24	...	...	...	6	„ 4	...	...	...	7
„ 25	...	...	...	22	„ 5	...	...	...	4
„ 26	...	...	...	17	„ 6	...	...	...	3
„ 27	...	...	...	18	„ 7	...	...	...	2
„ 29	...	...	...	4	„ 10	...	...	...	1
„ 30	...	...	...	1	„ 11	...	...	...	5
July 1	...	...	...	2	„ 12	...	...	...	3

July 13	...	...	...	1	Aug. 3	...	...	...	2
„ 14	...	...	...	3	„ 5	...	...	...	1
„ 15	...	...	...	1	„ 7	...	...	...	1
„ 16	...	...	...	1	„ 9	...	...	...	1
„ 19	...	...	...	1	„ 10	...	...	...	2
„ 20	...	...	...	1	„ 11	...	...	...	9
„ 23	...	...	...	5	„ 12	...	...	...	2
„ 25	...	...	...	1	„ 15	...	...	...	1
„ 26	...	...	...	1	„ 19	...	...	...	2
„ 28	...	...	...	1	„ 20	...	...	...	3
„ 29	...	...	...	1					
„ 30	...	...	...	4	Total	...	...	...	174
Aug. 1	...	...	...	1					

And from the cessation of his attendance on the patients in the prison to the end of the attack the cases were as follows :

Aug. 22	...	...	...	1	Sept. 9	...	...	...	8
„ 23	...	...	...	1	„ 10	...	...	...	2
„ 24	...	...	...	5	„ 11	...	...	...	5
„ 26	...	...	...	4	„ 12	...	...	...	7
„ 27	...	...	...	2	„ 13	...	...	...	1
„ 28	...	...	...	5	„ 14	...	...	...	1
„ 29	...	...	...	8	„ 29	...	...	...	1
„ 30	...	...	...	11	Oct. 1	...	...	...	3
„ 31	...	...	...	10	„ 16	...	...	...	1
Sept. 1	...	...	...	11	„ 30	...	...	...	1
„ 2	...	...	...	11	Dec. 14	...	...	...	2
„ 3	...	...	...	4	„ 18	...	...	...	1
„ 4	...	...	...	2	„ 26	...	...	...	1
„ 5	...	...	...	6	„ 27	...	...	...	1
„ 6	...	...	...	5					
„ 7	...	...	...	5	Total	...	...	...	133
„ 8	...	...	...	7					

The entire number of cases during these periods was 339, viz. :

From June 3rd to June 21st	...	...	32
„ 22nd „ Aug. 20th	...	...	174
Aug. 22nd „ Dec. 27th	...	...	133
Total	...	...	<u>339</u>

The collapse cases during the period from June 3rd to December 31st were as follows :

June 3	...	...	...	1	July 4	...	...	...	3
„ 10	...	..	...	1	„ 5	...	...	...	2
„ 11	...	...	...	1	„ 7	...	...	...	1
„ 13	...	...	...	1	„ 8	...	...	...	1
„ 15	...	...	...	1	„ 9	...	..	...	1
„ 16	...	...	...	1	„ 10	..	...	...	1
„ 17	...	...	...	6	„ 12	...	...	...	1
„ 18	...	...	...	2	„ 21	...	...	...	1
„ 19	...	...	...	3	„ 24	...	...	...	1
„ 20	...	...	...	1	„ 25	...	...	...	2
„ 22	...	...	...	5	„ 28	...	...	.	1
„ 23	...	...	...	5	„ 29	...	...	...	1
„ 24	...	...	...	5	„ 30	...	...	...	2
„ 25	...	...	...	14	Aug. 4	...	...	...	1
„ 26	...	...	...	6	„ 6	...	...	...	2
„ 27	...	...	...	2	„ 8	...	...	...	1
„ 28	...	...	...	6	„ 12	...	...	...	4
„ 29	...	...	...	6	„ 13	...	...	...	4
„ 30	...	...	...	2	„ 14	...	...	...	2
July 1	...	...	...	2	„ 19	...	...	...	3
„ 2	...	...	...	2	„ 21	...	...	...	2
„ 3	...	...	...	1	„ 23	...	...	...	3

Aug. 24	...	...	...	2	Sept. 4	...	...	...	1
„ 25	...	...	...	3	„ 5	...	...	...	2
„ 27	...	...	...	2	„ 6	...	...	...	3
„ 28	...	...	...	4	„ 29	...	...	...	1
„ 29	...	...	...	4	Oct. 31	...	...	...	1
„ 30	...	...	...	6	Dec. 15	...	...	...	1
„ 31	...	...	...	6	„ 18	...	...	...	1
Sept. 1	...	...	...	2	„ 19	...	...	...	1
„ 2	...	...	...	5					
„ 3	...	...	...	3					
					Total	...	...	...	162

During the second visitation the deaths amounted to 34, and occurred as follows :

June 5	...	...	...	1	Aug. 3	...	...	...	1
„ 14	...	...	...	1	„ 28	...	...	...	1
„ 15	..	...	...	1	„ 29	...	...	...	1
„ 18	...	...	...	1	„ 30	...	...	...	1
„ 22	...	...	...	5	„ 31	...	...	...	1
„ 23	...	...	...	2	Sept. 1	...	...	...	1
„ 24	...	...	...	1	„ 2	...	...	...	2
„ 25	...	...	...	2	„ 4	...	...	...	1
„ 28	...	...	...	1	„ 5	...	...	...	1
„ 29	...	...	...	2	„ 29	...	...	...	1
July 3	...	...	...	1	Nov. 1	...	...	...	1
„ 9	...	...	...	1	Dec. 20	...	...	...	1
„ 23	...	...	...	1					
„ 29	...	...	...	1					
					Total	...	...	...	34

Dr. Stevens ceased a second time to visit the prison about the 20th of August, and, singularly enough, the saline treatment appears to have been partially abandoned a second time speedily there-

after, viz., from the 28th of August to the 5th of September. The result was as disastrous as on the first abandonment, for it is shown from the prison journals that during this brief period no less than nine Cholera patients were lost.

Once more recourse was had to the saline treatment, and once more it proved a specific in arresting the disease. Indeed, when all fair allowances are made, we shall find that it proved as powerfully beneficial during the second irruption as in the first. In doing this we must write off from the entire mortality among the Cholera patients the following items :

Died from the 13th of June to the 25th of June, in cases wherein the salines were abandoned ...	12
Died, on the day of admission, having been admitted when <i>in articulo mortis</i>	7
Died from other diseases a long period after recovery from Cholera	2
Died from the 28th of August to the 5th of Sep- tember, while the saline treatment was a second time abandoned	9
Died under cold affusion	1
Total	<hr/> 31

These deducted from the total number of deaths leave a mortality of only 3 in 308 cases, including 131 cases of collapse. Thus the saline treatment, during the second visitation, was attended by a

mortality of less than one per cent. ; and whether we regard the entire number of cases in which the patients exhibited the symptoms of the second stage, or the large proportion of collapse cases, the result alike demonstrates the efficiency of the new treatment.

It has been suggested in a recent number of the "Medical Gazette," that "the advocates of the several modes of treatment have not attended sufficiently to the period or stage of the disease at which each case was commenced." In respect to this very important point, it is to be observed that in a great number of the cases above enumerated, the disease had supervened for some time, and the whole of the patients had reached the stage of spasm which, in Dr. Stevens' classification, is placed as the second, and many of the patients had even sunk into the last or collapse stage before treatment. It is perhaps well to repeat here, that when a prisoner complained of bowel complaint during the prevalence of Cholera in the gaol, he was placed in an observation ward and treated with seidlitz powders and a mild form of the usual salines, and dieted, among other things, with beef tea well salted. This treatment prevailed in twenty-four out of twenty-five cases, and it was not until symptoms of cramp and spasm set in, that the patients were considered as labouring under

Cholera. The fact of the cases occurring in a gaol was very adverse to successful treatment, because attacks of this disease are most frequent between midnight and dawn, and in Coldbath-fields more collapse cases occurred between the hours of midnight and four in the morning than during any other period.

Notwithstanding, however, these adverse circumstances, the great fact remains that, in the two visitations in the gaol, viz., from the 30th of April to the 11th of May, 1832, and from the 3rd of June to the 31st of December of the same year, upwards of 460 cases of Cholera were treated on the saline plan with a mortality of only four, or less than one per cent.; in all the patients had reached the second or cramped stage of the disease, and upwards of 160 had reached the collapse state.

It may be proper to state here that Mr. Wakefield has denied that he ever abandoned the saline treatment. In a letter which we have seen, dated September the 5th, 1850, Mr. Wakefield says—"To say that I ever abandoned the saline treatment is as unjust as it is untrue. A warmer and a more steady advocate of the plan does not exist. I have never given up the principle since I first witnessed its success; and although it may have been varied in the proportions given, still the saline principle of the non-purgative salts has

been the sheet-anchor upon which I have relied up to the present moment in the treatment of Cholera, and has been successfully carried out, not only this year but during the last, in the prisons under my care."

Mr. Wakefield, as has been shewn, had every reason to repose confidence in the saline treatment, and, in his own words, to regard it as a "sheet-anchor" in saving human life attacked by Cholera. But he seems not to have been satisfied with a sheet-anchor simply, for we find him describing a very special instance of his having abandoned it, in a paper communicated by him to the "Medical Gazette" of Dec. 30th, 1832. The instance in question was that of a woman named Mary Driscoll, one of the last cases of Cholera occurring that year. Mr. Wakefield states that in that case the saline treatment was pursued without making any impression; "I then determined," says he (thirty hours after the seizure), "to make trial of the cold affusion, which had been tried with success in Berlin, and which was mentioned in a late number of the 'Medical Gazette' by Dr. Burrows, of Mortimer-street. The patient was carefully removed from bed, and placed in a large bathing tub; she was then stripped to her skin, and I dashed five large jugs of cold water over her. The shock was considerable, but the last jug only seemed to distress her. She was with equal care removed

to bed, and well rubbed with dry cloths. No reaction took place; and although she lived twenty-four hours afterwards, the only advantage she appeared to derive from cold affusion was the immediate relief of the intense burning heat in the abdomen, and the acute pain in the left side, in the region of the spleen, which is almost a constant attendant upon the fatal cases of Cholera. The want of success which followed this trial of the cold affusion will not deter me from again making use of it when the opportunity offers, and I shall be happy to inform you of the result."

It is not easy to reconcile Mr. Wakefield's non-perseverance with the "sheet-anchor," and his resort to cold affusion, with his emphatic declaration that "to say that he ever abandoned the saline treatment is as unjust as it is untrue;" but indeed the whole bearing of Mr. Wakefield's communication to the "Medical Gazette," from which the cold affusion experiment has been copied, is very perplexing. The impression which it was calculated to produce on the profession and the public undoubtedly was that Mr. Wakefield had lost all confidence in the saline treatment; hence his search after other remedies, and his flying to so extreme an experiment as dashing cold water over the naked body of the patient in the coldest period of the year—a course quite at variance with the principles and practice of the saline treatment. It may be observed, too, that although the effect

of the saline remedies was in general so immediate as almost to deserve the term magical, yet the treatment included the closest and most unremitting application of the subsidiary means which are mentioned in the preceding illustrative cases: whether these were applied by Mr. Wakefield in this case does not appear from his statement in the "Medical Gazette;" but it certainly does appear that in it he very soon abandoned the the saline treatment for a new and, as far as his own practice went, an untried experiment; and then, as if to rivet in the public mind the impression that he had lost confidence in the saline treatment, he added that the failure of the dashing of cold water over the collapsed body of the patient, would not deter him from again making use of that fatal experiment. It is thus clear on his own showing that Mr. Wakefield did abandon the saline treatment; and not only so, but we find him intimating that he would continue that abandonment whenever the opportunity offered.

Nor does the circumstance of the saline treatment having been tried in the case in question render Mr. Wakefield's conduct in the least degree more intelligible; for although he states that it was thirty hours after seizure before the cold affusion was resorted to, he does not mention the extent to which he applied the saline treatment. The fact, however, that in such a disease as

Cholera, with its frightful rapidity of termination, the patient was alive thirty hours after seizure, and in such a state as to be able, in the opinion of her medical attendant, to undergo so extreme an ordeal as the dashing of cold water over her naked body, may not unnaturally be supposed to speak somewhat in favour of the previous treatment, whatever that was.

But the evidence of the abandonment of the saline treatment by Mr. Wakefield does not consist solely of his own testimony, afforded in the very remarkable letter above referred to. Dr. Stevens ascertained from a nurse in the infirmary of the prison, that between the 13th of June and the 21st of the same month, Mr. Wakefield treated many cases of Cholera with small doses of carbonate of soda. Dr. Stevens also ascertained that between the 28th of August and the 5th of September that the saline treatment had again been abandoned, and in lieu thereof nine of the patients were treated on the Board of Health plan.

During those periods of abandonment of the saline treatment, it may be seen from the nominal schedule of patients in the second visitation of the Cholera to this prison, that the mortality was very considerable; and that, indeed, all the patients in whose cases the treatment was thus varied, died. Dr. Stevens, not only in private but also in the presence of others, charged

Mr. Wakefield with permitting this second abandonment of the saline treatment, when he visited the prison early in September, on having been informed that the Cholera was again making fatal ravages there, and he had proceeded thither in order to ascertain whether the saline treatment had been adhered to or abandoned. Neither the wisdom nor professional propriety of this variation in the treatment of the patients is sought to be impugned here, but it is submitted that it has been clearly proved on his own authority, and on the evidence of Dr. Stevens, that Mr. Wakefield did several times, in certain cases, abandon the saline treatment; while the great increase of fatal results in the cases treated during the two periods in which it is alleged that the new treatment was abandoned, suggests some degree of corroborative internal evidence in favour of the truth of such abandonment.

CHAPTER VIII.

THE narrative of the second outbreak of the disease in Coldbath-fields will be appropriately concluded by a special detail of the patients, similar to that given in connection with the first visitation, as follows :

Enumeration of all the Cholera patients in Coldbath-fields prison, who suffered the second or third stages of the disease from the breaking out of the second attack June 3rd to December 27th, 1832, exhibiting the dates of attack, collapse or death, and also the mode of treatment. The fatal cases are distinguished by the letter D and the date of the death added to the name of the patient; in all the rest the patients recovered.

Name of Patient.	Date of Attack.	When Confirmed or Collapsed.	Treatment.
Margaret Kelly... } (D. June 5) }	June 3	June 3	Saline
Sarah Pooley	" 7	" 11	ditto
Rachael Pearson ...	" 8	" 10	ditto
Sarah Moore	" 12	" 13	ditto
Johanna Smith ... } (D. June 14) }	" 12	" 15	Too late for treatment
Ann Easton	" 13	" 17	Saline
Jane M. Martin... } (D. June 22) }	" 15	" 17	3 to 5 grs. carb. of soda given at long intervals.
J. Smith (child)... } (D. same day) }	" 15	.....	Too late for treatment
John Morris	" 16	" 23	Saline
Brid. Grundy	" 16	" 17	ditto
Dennis Riorden... } (D. June 22) }	" 17	" 17	Small doses carb. soda
John Williams ... } (D. June 22) }	" 17	" 17	Small doses carb. soda
Robert Collins	" 17	" 17	Saline
John Shannon	" 17	" 18	ditto
Francis Du Boes ...	" 18	" 19	ditto
Carolus Grame.....	" 18	" 19	ditto
John Ackers.....	" 18	" 22	ditto
Anthony Vitch ... } (D. June 22) }	" 18	" 18	3 to 5 grs. carb. soda
Eliz. Goodhall ... } (D. same day) }	" 18	" 18	Too late for treatment

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Name of Patient.	Date of Attack.	When Confirmed or Collapsed.	Treatment.
Caroline King	June 18	June 20	Saline
John Murphy	" 19	" 22	ditto
John Hawkins ... } (D. June 22) }	" 19	" 22	3 to 5 grs. carb. of soda given at long intervals.
George Sudman ...	" 20	" 22	ditto
John Hall.....	" 20	" 22	ditto
Wm. Brown.....	" 20	" 22	Saline
Susan Deacon ... } (D. June 24) }	" 20	" 23	Doubtful
Susan Kelly.....	" 20	" 23	Saline
Ann Lambert	" 20	" 23	ditto
James Roger	" 20	.....	ditto
Edward Blacklock .	" 21	.....	ditto
C. Bradley	" 21	.....	ditto
John James	" 21	.....	ditto
George Corney ...	" 22	.....	ditto
Wm. Bryan	" 22	.....	ditto
Thos. Taylor	" 22	.....	ditto
Richard Jackson ...	" 22	" 25	ditto
James Holdwell ...	" 22	" 25	ditto
James Wellington .	" 22	.....	ditto
James Clark.....	" 22	.....	ditto
Michael Holland ...	" 22	.....	ditto
John Musseto	" 22	" 23	ditto
John Harris.....	" 22	" 25	ditto
T. Hollingbury ...	" 22	.....	ditto
Wm. Barnett	" 22	.....	ditto
James Thorn	" 22	" 27	ditto
Thos. Lawrence ...	" 22	.....	ditto
Wm. Hemming ...	" 22	" 25	ditto
Solomon Taylor ...	" 22	" 25	ditto
Michael Allen	" 22	.....	ditto
James Simmonds...	" 23	.....	ditto
George Pickering...	" 23	" 25	ditto
J. Shuttleworth ...	" 23	" 24	ditto
M. A. Beckwith . } (D. June 23) }	" 23	" 23	Too late for treatment
Sarah Hayes	" 23	" 23	Too late for treatment
(D. June 23) }			

Name of Patient.	Date of Attack.	When Confirmed or Collapsed.	Treatment.
Wm. Edwards	June 24	June 25	Saline
James Carter	" 24	.....	ditto
Thos. Bleason	" 24	.....	ditto
Elizabeth Ward ...	" 24	" 24	ditto
Eliza Williams.....	" 24	" 24	ditto
Ellen Connor	" 24	" 24	ditto
Joseph Herring ...	" 25	.....	ditto
James Manby	" 25	July 1	ditto
H. Cooper.....	" 25	June 28	ditto
Thos. Kirby } (D. June 25) }	" 25	" 25	Too late for treatment
John Reagon } (D. June 25) }	" 25	" 25	Too late for treatment
Wm. Davidson.....	" 25	" 25	Saline
C. Dunbar	" 25	" 25	ditto
Alexander Sessie ...	" 25	" 25	ditto
Daniel Holland ...	" 25	" 25	ditto
Wm. Rowland	" 25	July 3	ditto
Richard Card ... } (D. July 3) }	" 25	June 25	ditto
David Holland ... } (D. July 9) }	" 25	" 25	ditto
James Allen.....	" 25	" 28	ditto
Edward Kerry ... } (D. June 28) }	" 25	" 26	ditto
Benjamin Passey ...	" 25	" 26	ditto
Alfred Miles	" 25	.....	ditto
Joseph Allen ... } (D. July 12) }	" 25	" 28	ditto
Jane Taylor	" 25	" 26	ditto
A. Richardson	" 25	" 27	ditto
Julia Ingall	" 25	" 27	ditto
John Manby.....	" 25	" 28	ditto
John Harris.....	" 25	.....	ditto
James Catanack ...	" 26	" 26	ditto
John Moore	" 26	.....	ditto
J. J. Gower.....	" 26	.....	ditto
James Sullivan.....	" 26	July 4	ditto
James Gravenor ...	" 26	.....	ditto

Name of Patient.	Date of Attack.	When Confirmed or Collapsed.	Treatment.
Thos. Brown	June 26	.....	Saline
Thos. Green.....	" 26	June 28	ditto
Robert Collins	" 26	" 26	ditto
Thos. Brenner	" 26	" 28	ditto
George Stevens ...	" 26	July 2	ditto
Thos. Francis	" 26	.....	ditto
Wm. King	" 26	.....	ditto
Charles Morley ...	" 26	.....	ditto
Stephen Brown ...	" 26	.....	ditto
Grgnr. Harris	" 26	.....	ditto
Ann Morris	" 26	" 4	ditto
T. Hollingbury ...	" 27	.....	ditto
Richard Steward ...	" 27	.....	ditto
Wm. Thorn	" 27	.....	ditto
Godfrey Nokes ...	" 27	June 29	ditto
Rachel Stewart ...	" 27	" 30	ditto
Henry King	" 27	" 29	ditto
Henry Butcher ...	" 27	" 30	ditto
Joseph Jones	" 27	" 29	ditto
Thos. Collins	" 27	.....	ditto
Wm. White	" 27	.....	ditto
Joseph Green	" 27	.....	ditto
Thos. Hurn	" 27	.....	ditto
Wm. Booth	" 27	.....	ditto
Caroline Thornton .	" 27	.....	ditto
Elizabeth Leach ...	" 27	.....	ditto
Margaret Smith ...	" 27	.....	ditto
Elizabeth Isaacs ...	" 27	.....	ditto
John Pratt	" 27	July 4	ditto
M. Bloomfield	" 27	.....	ditto
Elizabeth Greaves .	" 27	" 5	ditto
John Keyberth ...	" 29	.....	ditto
Ann Smith	" 29	June 29	Too late for treatment
(D. June 29) }			
Jane West	" 29	" 29	Saline
M. West (child) . }	" 29	" 29	Too late for treatment
(D. June 29) }			
J. C. Woodstock ...	" 30	.....	Saline
A. Goodfellow	" 30	July 1	ditto

Name of Patient.	Date of Attack.	When Confirmed or Collapsed.	Treatment.
James Anderson ...	July 1	.....	Saline
Catherine Donuhue	" 2	.....	ditto
Elizabeth Brown ...	" 2	.....	ditto
Rebecca Sutton ...	" 2	July 9	ditto
Lucy Cottrill	" 2	.....	ditto
Margaret Jones ...	" 2	.....	ditto
Catherine Hughes .	" 2	" 10	ditto
Pierce Dalton	" 2	.....	ditto
John Totham	" 2	.....	ditto
John Watson	" 2	.....	ditto
Wm. Perry	" 2	" 5	ditto
John Horney	" 3	.....	ditto
Robert Baldwin ...	" 4	.....	ditto
Frederick Williams	" 4	.....	ditto
John Brown.....	" 4	.....	ditto
Ann Morris	" 4	" 7	ditto
Wm. Johnson	" 4	.....	ditto
Francis Bradley ...	" 4	.....	ditto
Elizabeth Copeland	" 4	.....	ditto
Francis Wheeler ...	" 4	.....	ditto
John Freegrove ...	" 4	.....	ditto
Thos. Jones	" 4	.....	ditto
Elinor Roberts.....	" 5	" 5	ditto
James Oglore	" 6	.....	ditto
Wm. Bryan	" 6	.....	ditto
— M'Intyre	" 6	.....	ditto
J. S. Gower.....	" 7	.....	ditto
John Jude	" 7	" 8	ditto
Wm. White	" 10	.....	ditto
James Watmore ...	" 11	" 12	ditto
David Barry.....	" 11	.....	ditto
John Thomas	" 11	.....	ditto
Clara King	" 11	.....	ditto
James Bone	" 11	.....	ditto
Thos. Burton	" 12	.....	ditto
James Taylor	" 12	ditto
Robert Smith	" 12	ditto
James Bloomfield...	" 12	ditto
Wm. Gore	" 13	ditto

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Name of Patient.	Date of Attack.	When Confirmed or Collapsed.	Treatment.
Peter Keats	July 14	Saline
Arch. Cridley	" 14	.....	ditto
Thos. Brenning ...	" 14	.....	ditto
John Blewit.....	" 15	.....	ditto
John Doughty.....	" 16	.....	ditto
Thos. Bradshaw... } (D. July 24) }	" 20	July 21	ditto
Thos. Reynolds ...	" 20	.....	ditto
Daniel Sullivan ...	" 23	" 24	ditto
Wm. Ivers	" 23	" 25	ditto
John Fowler	" 23	" 25	ditto
George Pickering .	" 23	.....	ditto
Richard Stewart ...	" 23	.....	ditto
Daniel Barrett	" 28	" 28	ditto
George Alldons... } (D. July 29) }	" 29	" 29	Too late for treatment
John Scraig	" 30	" 30	Saline
Daniel Sullivan... } (D. Aug. 3) }	" 23	" 23	ditto
Susan Bond	" 30	.....	ditto
Ann Ellins	" 30	.....	ditto
James Riorden.....	Aug. 1	.....	ditto
Thos. Davis	" 3	Aug. 6	ditto
Wm. Marshall	" 3	" 4	ditto
Mary Bulling	" 5	" 6	ditto
John M'Keaton ...	" 7	" 8	ditto
Mary Collins	" 9	.....	ditto
Patrick Owen	" 10	" 12	ditto
Wm. Worley	" 10	" 19	ditto
James Chapman ...	" 10	.....	ditto
Samuel Litchfield .	" 11	" 12	ditto
James Martin	" 11	" 12	ditto
Wm. Harber	" 11	" 13	ditto
John Watmore.....	" 11	" 13	ditto
George Thomas ...	" 11	" 13	ditto
Benjamin Owen ...	" 11	" 13	ditto
James M'Kenley...	" 11	" 14	ditto
Robert Simpson ...	" 11	" 14	ditto
Ann Ellins	" 12	" 12	ditto

Name of Patient.	Date of Attack.	When Confirmed or Collapsed.	Treatment.
Ann Brown	Aug. 12	.....	Saline
James Bland	" 15	Aug. 21	ditto
Henry Bowman ...	" 20	" 21	ditto
Thos. Jackson	" 20	" 23	ditto
Henry Beaumont...	" 20	" 23	ditto
John Donovan.....	" 19	" 19	ditto
Wm. Robinson.....	" 19	" 19	ditto
John Sennon	" 22	" 23	ditto
Wm. Howlett	" 23	" 24	ditto
Susan Bond	" 24	" 30	ditto
Wm. Sanders	" 24	" 24	ditto
John Jones	" 24	" 25	ditto
Wm. Brogan	" 24	" 25	ditto
Thos. Jones	" 24	" 25	ditto
George Fitzgerald .	" 26	" 27	ditto
Elizabeth Edwards	" 26	" 27	ditto
M. A. Sheirs	" 26	Sept. 2	ditto
Sarah Harrison ...	" 26	" 2	ditto
Wm. Smith	" 27	Aug. 28	ditto
Richard Hancock...	" 27	" 28	ditto
Edward Dundas .	" 28	" 28	Board of Health
(D. Aug. 28) }	" 28	" 28	ditto
Thos. Smith	" 28	" 28	ditto
(D. Sept. 4.) }	" 28	" 29	ditto
John Griffiths ...	" 28	" 29	ditto
(D. Sept. 2) }	" 28	" 29	ditto
Samuel Owen ...	" 28	" 29	ditto
(D. Aug. 30.) }	" 28	" 30	Saline
Wm. Farrell.....	" 28	" 30	Saline
S. Martin	" 29	" 29	Board of Health
(D. Aug. 30) }	" 29	" 30	Saline
David Tobin.....	" 29	" 30	ditto
Wm. Hogan.....	" 29	Sept. 2	ditto
Timothy Connell. }	" 29	Aug. 31	Board of Health
(D. Aug. 31) }	" 29	" 31	ditto
George Davis ...	" 29	" 31	ditto
(D. Sept. 1) }	" 29	Sept. 2	ditto
John Smith	" 29	Sept. 2	ditto
(D. Sept. 2) }	" 29	Sept. 2	ditto

Name of Patient.	Date of Attack.	When Confirmed or Collapsed.	Treatment.
Wm. Turner	Aug. 29	Aug. 30	Saline
Ann Baring	" 29	" 29	ditto
John Roberts	" 30	.....	ditto
Henry Rockhall ...	" 30	.....	ditto
George Fitzwater...	" 30	" 30	ditto
John Proctor..... } (D. Sept. 5)	" 30	Sept. 2	Board of Health
John Morris.....	" 30	.....	Saline
John Hicklock.....	" 30	.....	ditto
A. Hemingare	" 30	" 3	ditto
Wm. Burls	" 30	.....	ditto
John Smith	" 30	Aug. 31	ditto
Wm. Parker.....	" 30	.....	ditto
Thos. Attword.....	" 30	" 30	ditto
M. A. Simmons ...	" 31	" 31	ditto
M. A. Sanders.....	" 31	" 31	ditto
Mary Mitchell	" 31	" 31	ditto
John Careless	" 31	.....	ditto
John Shield	" 31	Sept. 4	ditto
Richard Baker.....	" 31	.....	ditto
James Bird	" 31	" 5	ditto
Benjamin Isaacs ...	" 31	" 5	ditto
Thos. Bennett	" 31	.....	ditto
Wm. Hennessy ...	" 31	.....	ditto
George Fitzgerald .	Sept. 1	.....	ditto
James Smith	" 1	" 1	ditto
Wm. Mitchell	" 1	" 1	ditto
Thos. Peoson	" 1	.....	ditto
James Wilds.....	" 1	.....	ditto
Edward Marcomb .	" 1	.....	ditto
James Mingard ...	" 1	.....	ditto
Ann Welsh	" 1	.....	ditto
Susan Adams	" 1	.....	ditto
Ann Walters	" 1	.....	ditto
Jane Turner.....	" 1	.....	ditto
John Thomas	" 2	.....	ditto
Mary Jones	" 2	.....	ditto
Elizabeth Spelling .	" 2	.....	ditto
Elizabeth Spring...	" 2	.....	ditto

Name of Patient,	Date of Attack,	When Confirmed or Collapsed.	Treatment.
Rosa M'Cake	Sept. 2	.....	Saline
Ann Barnes	" 2	.....	ditto
Ann Butt	" 2	.....	ditto
Mary Sullivan	" 2	.....	ditto
Ellen Bow	" 2	.....	ditto
Ann Hamilton	" 2	.....	ditto
Mary Taylor	" 2	.....	ditto
Wm. Ivers	" 3	.....	ditto
George Lareton ...	" 3	.....	ditto
Joseph Davenport .	" 3	Sept. 3	ditto
John Roberts	" 4	.....	ditto
Thos. Williams ...	" 4	.....	ditto
Joseph Prestow ...	" 4	" 6	ditto
T. Ringwood	" 5	" 6	ditto
Henry Hitchcock .	" 5	" 5	ditto
David Newman ...	" 5	" 6	ditto
Stephen Merrick ...	" 5	.....	ditto
Charles Flitt.....	" 5	.....	ditto
John Bushford	" 6	.....	ditto
Henry Herrick.....	" 6	.....	ditto
Thos. Castle	" 6	.....	ditto
James Williams ...	" 6	.....	ditto
Henry King.....	" 6	.....	ditto
John Finley	" 7	.....	ditto
George Conwell ...	" 7	.....	ditto
James Hopkins ...	" 7	.....	ditto
James Roberts	" 7	.....	ditto
James Wilds	" 7	.....	ditto
James Cornelius ...	" 8	.....	ditto
James Thomas.....	" 8	.....	ditto
John Steel	" 8	.....	ditto
Wm. Parker.....	" 8	.....	ditto
James Morris	" 8	.....	ditto
James Whittaker...	" 8	.....	ditto
Henry Wallis	" 8	.....	ditto
John Forrester.....	" 9	.....	ditto
John Shannon	" 9	.....	ditto
Henry Phillips.....	" 9	.....	ditto
Aaron Morris	" 9	.....	ditto

Name of Patient.	Date of Attack.	When Confirmed or Collapsed.	Treatment.
Wm. Newry.....	Sept. 9	.....	Saline
Samuel Fowler ...	" 9	.....	ditto
George Bennett ...	" 9	.....	ditto
Mary Collins	" 9	.....	ditto
John Defoyle	" 10	.....	ditto
Wm. Hill	" 10	.....	ditto
Ann Brown	" 11	.....	ditto
Wm. Wilson.....	" 11	.....	ditto
Wm. Williams ...	" 11	.....	ditto
Wm. Robinson.....	" 11	.....	ditto
Robert Frost	" 11	.....	ditto
John Ladbury	" 12	.....	ditto
John Shields	" 12	.....	ditto
John Grace	" 12	.....	ditto
W. Harrington.....	" 12	.....	ditto
R. Chamberlain ...	" 12	.....	ditto
Wm. Hyler	" 12	.....	ditto
Ann Ellins	" 12	.....	ditto
Jane Prestow	" 13	.....	ditto
John Reid	" 14	.....	ditto
Ellen Miller } (D. Sept. 30)	" 29	Sept. 29	ditto
Rachael White.....	Oct. 1	.....	ditto
Sarah Stokes	" 1	.....	ditto
Ann Weston.....	" 16	.....	ditto
Thos. Homer	" 30	.....	ditto
Wm. Nowland ... } (D. Oct. 31)	" 30	Oct. 30	ditto
Ruth Pedley.....	Dec. 14	Dec. 15	ditto
Richard Midland ...	" 14	" 18	ditto
Mary Driscoll ... } (D. Dec. 20)	" 18	" 19	ditto
Wm. Allen	" 26	.....	ditto
Robert Bricknell ...	" 27	.....	ditto

Total number of cases, 338 ; of collapse cases, 162 ; under the saline treatment, about 307 ; of deaths, under the new practice, 3 ; of recoveries, 304 ; total number of patients treated under other plans of treatment, 31 cases with 31 deaths, and not one recovery.

CHAPTER IX.

THE BOARD OF HEALTH TAKE OFFICIAL NOTICE OF THE CHOLERA IN COLDBATH-FIELDS: HOW THEY INSPECTED THE PRISON, AND THE REPORT THEY MADE.

THE Board of Health were no doubt sufficiently advised of the state of Coldbath-fields prison in respect to the Cholera. One of their inspectors, Dr. M'Cann, frequently visited the prison during the first irruption, and continued his visits after the second visitation had set in. But it does not appear that the medical chiefs of the Board had any personal acquaintance with the prison until the 27th of June, when Dr. Barry, the most prominent member of the Board, paid a visit of a few minutes to its infirmary; on the following day this gentleman paid another flying visit to the infirmary of the prison, but on both occasions he spent no longer time within its walls than a period of about three-quarters of an hour. The visit on the 27th Dr. Barry describes as private, but the second, that on the 28th, is clothed with the grave official character of a Government inspection ordered by the Privy Council. Dr. Barry published in the medical journals of July,

1832, a series of six official documents, in which he stated the case of the Board of Health against the new treatment. The object of those documents was evidently to show that the statements of numerous cases of Cholera having occurred in the prison, and of the splendid success of the saline treatment there, were both exaggerated and untrue. The publication of the documents now referred to, and of certain "returns" from the prison, doubtless excited a very malignant influence upon the reputation of the new treatment, and in the sequel it will be shewn that that influence remains up to the present time. In order, therefore, to shew upon how slender a foundation the official condemnation of the saline treatment rested, we insert here the documents in question, and shall afterwards examine them in detail.

"CHOLERA IN COLDBATH-FIELDS PRISON : SALINE TREATMENT.

" Official Papers transmitted by Sir David Barry to the Editor of the ' Lancet,' and also to the ' London Medical Gazette.'

"Having lately seen various contradictory published reports—tending to produce vague notions and undefined alarms as to the Cholera cases in Coldbath-fields prison; having recently inspected that establishment on two successive days, viz., the 27th and 28th ult., and being anxious to avoid all suspicion of having made uncandid or unfair statements, I feel myself called upon to lay before the public and the profession all the facts which have come under my observation, connected with that subject.

“On the night of the 25th of June ult., in a casual conversation with Dr. William Stevens, at the College of Physicians, I learned, with no small astonishment, that he had seen upwards of forty cases of Cholera in Coldbath-fields prison within the preceding twenty-four hours. Struck with this formidable announcement, I requested permission to see these cases with the Doctor next morning, but could not obtain an appointment with him earlier than for the 27th.

“On that day I proceeded to the prison, rather in a private than official capacity, accompanied by Dr. O’Shaughnessy, whose ‘Report on the Chemical Pathology of Cholera’ entitles him to such high consideration in everything connected with what has been lately denominated the ‘saline treatment of that disease.’

“Dr. Stevens conducted us round all the wards appropriated to Cholera patients. On leaving the prison, at about half-past two o’clock p.m., I observed to him, in the presence of Dr. O’Shaughnessy, that I had seen no case of Cholera in the prison that day—meaning, as Doctor Stevens appeared to allow at the time, that I had seen none actually labouring under the characteristic symptoms of the disease.

“On the morning of the 28th, the following letter (No. 1) was addressed to the Governor of the prison, and immediately on the receipt of the Governor’s answer (No. 2), I received the order of the Central Board to proceed forthwith to examine into and report officially upon the sanitary state of the prison with reference to Cholera, agreeably to the instructions contained in Sir William Pym’s letter to me (No. 3.)

“It will be perceived by my letter (No. 4), and by the notes taken in the prison (No. 5), which I transmitted enclosed, that in this inspection I was accompanied by Mr. Maling, Deputy-Inspector General of Hospitals, and by Staff-Surgeon Dr. M’Cann, who have also signed the notes (No. 5.)

"The nominal return, marked A, reached the Central Board after the inspection just mentioned had been completed. The return, marked B, was received on the 30th ult.; and as no return has been since received from Coldbath-fields prison, it is evident from this circumstance, connected with the letter from the Privy Council to the Governor (marked No. 6), that no new case has occurred in that establishment since the 29th ult.

"In transmitting these documents for publication, I beg it to be understood that I am actuated by no wish to impede, and indeed I have no motives to oppose the full and fair development of the merits of any medicine, but more especially of culinary salt in Cholera, having myself given a favourable report of its use in that disease so long ago as the 30th of July last year. No one will rejoice more sincerely than I shall at the discovery of a really efficient remedy for that dreadful disease.

"With regard to the number of Cholera cases which occurred in Coldbath-fields prison, from the 2nd to the 26th of April this year, or during what has been called the first irruption of the disease into that establishment, I find that *twenty-four* cases only, and seven deaths, were reported to the Central Board. Not having had an opportunity of seeing any of those cases myself, I shall abstain from making any further remark upon them than this—that the prison, during the period referred to, was repeatedly visited by Dr. M'Cann, the Medical Superintendent of the district, and that he has officially reported to the Central Board, that he had every reason to believe that no greater number of cases of Cholera than twenty-four had occurred in the prison at that time. But this gentleman may, of course, be himself referred to on the subject, if necessary.

"D. BARRY.

"Central Board of Health, July 12, 1832."

(No. 1.)

“ Council-office, Whitehall,

“ June 28, 1832.

“ Sir,—A paragraph having appeared in the ‘Globe’ of last night, stating that the Cholera has raged with great violence in Coldbath-fields prison, and that upwards of one hundred had been attacked within the last twelve days, I am directed by the Lords of his Majesty’s Privy Council to request, that should there be any foundation for the above report, you will cause to be made out, with as little delay as possible, a nominal list of all persons attacked with the disease within the prison, during the 26th, 27th, and 28th instant, agreeable to the enclosed form.

(Signed)

“ W. L. BATHURST.

“ To the Governor of Coldbath-fields Prison.”

(No. 2.)

“ Coldbath-fields, June 28, 1832.

“ Sir,—I have the honour to acknowledge the receipt of your letter of this date, and in reply beg to acquaint you, for the information of the Lords of his Majesty’s Most Honourable Privy Council, that unfortunately much of the statement from the ‘Globe’ newspaper is correct. The medical attendant of the prison is not now in the way. In the course of a short time he will return, when your instructions shall be complied with.

“ I have the honour to be, &c.,

(Signed)

“ G. L. CHESTERTON,

“ Governor.

“ To the Hon. W. L. Bathurst, &c.

“ P.S. The number of persons now labouring under the disease, in its various degrees, is about seventy.”

(No. 3.)

“ Council-office, Whitehall, June 28, 1832.

“ Sir,—I am directed by the Lords of the Council to deliver to you the enclosed letter, from the Governor of Coldbath-fields prison, addressed to the Hon. William Bathurst, in which it is stated that the number of persons now labouring under Cholera (in its various degrees) in that prison is about seventy ; and to request that you will immediately visit that establishment, taking with you one or more medical gentlemen, for the purpose of inquiring into the particulars of the disease said to prevail there, and report upon the same to the Clerk of the Council in Waiting.

“ I am, Sir, your obedient humble servant,

“ W. PYM.

“ To Sir D. Barry.”

(No. 4.)

“ June 29, 1832.

“ Sir,—Agreeable to the instructions contained in your letter of yesterday, I have the honour to state that I lost no time in proceeding to the Coldbath-fields prison, in company with Deputy Inspector-General of Hospitals, John Maling, and Staff-Surgeon Francis M'Cann, with the view of examining the persons said to be labouring under Cholera in that establishment. Enclosed I transmit the notes taken by me on the spot. I return the Governor's letter to Mr. Bathurst, and have the honour to be, Sir,

“ Your most obedient humble servant,

“ D. BARRY.

“ To Sir W. Pym.”

(No. 5.)

“ Coldbath-fields Prison, June 28, 1832.

“ *Notes.*—Visited the wards appropriated to Cholera patients in this establishment at half-past four o'clock, accompanied

by Deputy Inspector-General of Hospitals, Maling, and Staff-Surgeon M'Cann, conducted by the Governor of the prison, and two Visiting Magistrates.

"Saw all the wards in which persons said to be labouring under Cholera were treated, and examined individually all those said to be on the sick-list then present.

"*1st Ward visited.*—Nine patients. One man who had been four days under the saline treatment for premonitory symptoms, had been attacked this morning, after having been discharged from hospital. A genuine case. Attempts were making, by a young man of colour, to introduce the tube for saline injection into one of the veins at the bend of the arm, under the direction of Mr. Wakefield. Tube could not be introduced, as I learned afterwards. Fluttering pulse. Livid and sunk countenance. This case will most probably prove fatal. Another man in this ward, looking thin, pale, depressed, hollow eyes, but good pulse, is under saline treatment. When I saw him about half an hour afterwards, his tongue was cold, with a weak, slow pulse. Ward small for the number of beds; close, hot, and oppressive, with a very large fire.

"*2nd Ward visited.*—Eighteen persons said to be on the sick-list in this ward. Two only present; boys, apparently well. This ward consists of two rooms; the inner a narrow slip. The sixteen not present were said to be out walking.

"*3rd Ward, called 'No. 5.'*—Six patients on the *Cholera Hospital Book*. Five present. One man complains of constipation of the bowels. One boy has had pains in his side and head, now better. No vomiting or purging. No appearance of Cholera in the others at present.

"*4th Ward visited.*—Eleven patients; all present. One boy with slow pulse, and depression of looks and spirits; may have an attack in the course of the night. All the others looking well, with no appearance of disease of any kind.

Informed by Mr. Wakefield, the Surgeon of the establishment, that the diet of the Cholera patients consists of arrow-root, tapioca, beef tea, coffee, and seidlitz-water for drink *ad libitum*; a wine-glass full at a time.

“*Convalescent Ward*.—Fourteen patients; all looking well.

“*Female Ward, No. 1*.—Nine patients; all looking well. One young woman apparently simulating Cholera; warm skin; good pulse and tongue. Said to be a very troublesome, perverse character.

“*Female Ward, No. 2*.—Nine patients. One now in mild fever. Said to have been a severe case of Cholera. One young woman with bad toothach.

“The two men in No. 1, already mentioned, are the only cases which I saw with the appearance of Cholera. Yet the Governor assured me repeatedly, that he had shown me *all* the persons considered by the medical gentlemen as labouring under any stage of the disease, and referred to in his letter of this day to Mr. Bathurst.

“The utmost cleanliness, regularity, and discipline appear to prevail in every part of the prison, so far as I was able to judge; and the Visiting Magistrates, who went round the wards with us, seemed to be actuated by the most humane feelings, and to devote much time and attention to the health and comfort of the prisoners.

“No new case admitted this day.

(Signed)

“D. BARRY.

“JOHN MALING.

“F. M'CANN.

“It is almost needless to observe, that no part of the preceding notes or statements is meant to refer to any time or circumstances connected with the patients anterior or posterior to the moments at which they were seen by Dr. O'Shaughnessy, Mr. Maling, Dr. M'Cann, and myself.

“D. B.”

(No. 6.)

“ Council-office, Whitehall,

“ June 29, 1832.

“ Sir,—I am directed to acknowledge the receipt, this day, of the return signed by Mr. Wakefield, of Cholera cases in Coldbath-fields prison, and to request that you will cause Mr. Wakefield to transmit, for the information of the Lords of his Majesty’s Most Honourable Privy Council, a *daily* return of such cases as may occur in the prison, instructing him, at the same time, to include in such daily return cases of confirmed Cholera only.

(Signed)

“ W. L. BATHURST.

“ To the Governor of Coldbath-fields Prison.”

Like the postscript to a lady’s letter, it must strike the attentive reader that the supplementary *caveat* (*vide* end of No. 5) in the report of Messieurs Barry, Maling, and M’Cann, is by far its most important portion, and therefore we shall first deal with it, praying the reader to go very attentively with us while we expose the trickery of this medical mystery.

In the first place we ask where was the necessity for such a caveat at all? No such restriction in their investigation as it implies was imposed by the Lords of the Council—no such restriction was compatible with common sense, far less with that full, fair, and impartial enquiry which so important an object demanded. In order to shew the absurdity of the restriction which these examiners

placed upon the enquiry, let us change the venue of the issue for a moment to another field of enquiry, in which Dr. Barry was employed by Government, and from which he returned, according to the testimony of the profession of the day, "as wise as he went." Suppose that, instead of Coldbath-fields prison, the hospitals of St. Petersburg had been the place wherein the order of the Lords of the Council had directed Dr. Barry and his co-investigators to enquire "into the particulars of the disease," we ask any man of common sense to say whether the said Lords of the Council would have been satisfied with an account of their labours in that investigation which openly, and, indeed, emphatically declared that their enquiries had been sedulously shut out from the consideration of that which they were sent to investigate, in respect to any time or circumstance connected with it, posterior or anterior to the moments at which the eyes and ears of the enquirers were actually engaged upon it?

The answer would surely be "No, they were directed to enquire into the particulars of the disease said to prevail in Coldbath-fields prison, and that direction was sufficiently broad and comprehensive to have warranted an investigation commencing at the first day when a case of Cholera was recorded on the books of the prison as having occurred therein." To this we add

that the order of Council not only WARRANTED an enquiry to that extent, but, in plain terms, COMMANDED it. What do we understand by the word "particulars?" We find Dr. Johnson defining it as "a minute detail of things singly enumerated." And how does such a report fulfil this demand for a minute detail of "the disease said to be prevailing" in Coldbath-fields?—by furnishing the Lords of Council with a series of jottings termed "notes," confined, in regard to the subject of enquiry in point of time and circumstance, to the moment at which the said objects came under the eyes of the enquirers! There is not within the whole body of those notes a single reference to aught else than the appearance presented by the patients viewed at the moment the enquirers ran through the wards in which they happened to be. There is no enquiry at any one of them when he came into the infirmary, what state he was in when he came, or how he had been while there. The Doctors looked upon the man or woman, as the case might be, and that glance was sufficient, in their judgment, to enable them to inform themselves of "the particulars of the disease in the prison."

But it may be said that Messieurs Barry, Maling, and M'Cann have in their "notes" or report literally defined the term "particulars," and given it a practical acceptation precisely in the

meaning of the great lexicographer whose definition we have quoted. That, we have seen, required a minute detail of things singly enumerated, and therefore Messieurs the enquirers, in their notes, return a statement of what they saw in "1st Ward visited," "2nd Ward visited," "3rd Ward visited," "4th Ward visited," "Convalescent Ward," "Female Ward, No. 1," "Female Ward, No. 2." And all this looks, at a first glance, so speciously, and is so apt to pass as "a minute detail of things singly enumerated," that one can hardly avoid thinking that the notes were framed after a careful consideration of Johnson's definition, the supreme object of the writer being to "keep the word of promise to the ear and break it to the sense." But we shall at once demolish such an apology for so extraordinary an evasion of a plainly-commanded duty, and, we must add, so gross a breach of common sense, by recalling to the reader's attention that Messieurs Barry, Maling, and M'Cann were commanded* to enquire "into the particulars of the DISEASE" in Coldbath-fields, and not merely into the STATE and OCCUPATION of the WARDS of the PRISON; and that, on their own shewing, they utterly neglected to perform that duty, contenting themselves with a flying inspection of some of the wards in the infirmary of the

* Dr. Barry received the order, and assumed, as it directed, the others as his co-enquirers.

prison, and *expressly excluding from their enquiry all reference to any time or circumstance connected with the patients anterior or posterior to the moment at which they were seen by them.*

Surely the reader has enquired by this time, "Was it really so?—Did three gentlemen of the medical profession actually make such a report to her Majesty's Privy Council?" Such questions may well be asked, and well may our surprise, nay, astonishment and indignation, be excited at finding that such things could be.

The singular manner in which this important enquiry was conducted, and especially its extraordinary restriction, in point of time and circumstance, suggests the following simile. The Privy Council issue an order upon Mr. Macaulay to enquire into the social and political history of England, and that accomplished historian performs his task by stating, in the shape of "notes," that "he had examined the shelves of the library of the British Museum, and he finds that there is such a work as 'Hume and Smollett's History of England,' and has 'noted' that it treats of divers events of a public nature connected with England from the time of Alfred the Great to the days of George III.;" but in a postscript adds "that it is needless to observe that he has not felt it necessary, in obeying their Lordship's directions, to go farther back

in his enquiries in reference to any time or circumstance than the exact moment at which he discovered the locale of Hume and Smollett, and the precise position in which the librarian stood on the floor of the Museum when he (Mr. Macaulay) observed those interesting facts.—Signed, T. B. M.”

Or, again, suppose the Privy Council, in their laudable anxiety to do justice in the matter of a convict condemned to die, direct certain gentlemen of the bar to enquire into the particulars of the charge of which the said convict has been attainted. It would be strictly analogical with the mode of enquiry adopted by Messrs. Barry, Maling, and M'Cann were the examining Barristers to report that they had found that the convict was a very sad fellow, and that he had certainly been condemned, adding a postscript to their report, in the form of a *caveat*, intimating that “it was needless to say that in their enquiry the Barristers had had no reference to any time or circumstance anterior or posterior to the precise moment when the jury returned their verdict !”

The mystery of the caveat, in all probability, was this. Probably one at least of the persons whose names are signed to Dr. Barry’s “notes” was ashamed of the whole affair, and insisted upon such a safeguard for his veracity as this caveat afforded. In avoiding Scylla the inspec-

tors plunged into Charybdis ; but their aversion to an absolute attestation of the “notes” was exceedingly natural, and we may assume its strength from the mere existence of the fact: hence they were induced to qualify their approval by an act which stamped the whole enquiry, and all the “notes” therewith connected, with the ineradicable character of utter nonsense.

And yet, although the caveat has clearly that effect upon the “notes,” and, therefore, places the conduct of the men who could thus trifle with a most solemn duty in a most questionable light, its assertions, although astounding in their import, are indubitably true. True it is, and of a verity, that the enquiries of Messieurs Barry, Maling, and M’Cann had no reference in point of time or circumstance connected with the patients anterior or posterior to the instant when they glanced at them (for a moment only) in the wards of the prison, as we shall demonstrate by a body of testimony, independent of the singular revelations of this most extraordinary caveat, postscript, or by whatever term its authors chose to know it. In the first place we shall shew the flying nature of their visit to the prison before the reader so clearly, that no one in the slightest degree acquainted with such subjects will overlook the fact that *the principal feature of their enquiry was the HASTE with which it was conducted.*

The first witness whose testimony we adduce to establish the charge against the “notes” or “report” is Mr. Rotch, who, we are glad to say, still survives to exercise the honourable functions of a Magistrate in the county of Middlesex, and who, at the time in question, was one of the Visiting Justices of Coldbath-fields prison. At the quarterly meeting of the Magistrates of the county of Middlesex, held at the Sessions House, Clerkenwell, on Thursday, the 12th of July, 1832, T. Const, Esq., in the chair, a discussion took place on the state of the Cholera in Coldbath-fields prison, elicited by statements in the daily papers of the latter end of June, to the effect that a Government enquiry into the state of the prison had been held, and it had been ascertained that there had been in reality almost no Cholera in the prison, and consequently the statements by the Surgeon of the prison and others of the severity of the attacks during the first and second visitations, as well as of the splendid success of the saline treatment, were gross exaggerations. We quote Mr. Rotch’s testimony from the report published in the “Medical Gazette” of that day :

“It so happened that he (Mr. Rotch) was at Coldbath-fields prison when three gentlemen, one apparently with authority from the Privy Council, demanded an admission to see the patients. At the outset, he must beg to state that, from the manner and conduct of these three gentlemen, it

was quite evident to him that they came to the prison decidedly with the preconceived idea in their minds that there was no Cholera there, and that the reports of the Visiting Magistrates were perfectly erroneous, and consequently not entitled to the slightest credit. Such a circumstance was not very pleasant to the feelings of gentlemen who had devoted great time to the subject (and he might say with some little risk to themselves); and he was anxious to know what account was to be laid before the Privy Council in opposition to that given the previous day. The report first made to the Privy Council was forty-two cases. Those gentlemen visited the prison on Thursday, the 28th of June, and were, he believed, all medical men. He felt it his duty to attend them round the wards, that he might hear their observations, and really know with what view they came to the prison. It would naturally be expected that, on such an occasion, gentlemen sent by the authority of the Privy Council to inquire into the actual state of the prison, would be exceedingly minute in their enquiries, in order to ascertain whether the cases reported were severe Cholera, or mild Cholera, or not Cholera at all. It was, however, a duty which he owed to the country, and also to his brother Magistrates, to state how the gentlemen conducted themselves. He wished not to cast any imputation upon them; he was not sufficiently skilled in medical science to know whether they had done their duty or not; but he would appeal to common sense as to whether the facts elicited, and the manner in which they were elicited, were sufficient to give authority for contradicting, in the 'Times' of the following day, the statements contained in the published letter. At the period when the gentlemen visited the prison, they were shown sixteen cases of persons who had been in a state of collapse, and had recovered from it. He would mention one instance to show the sort of examination that was entered

into. There was a female, named Clara King, aged 18, lying in bed in one of the wards, who had naturally a rosy hue. On that day, in the preceding week, the girl had been in the stage of collapse. One of the three gentlemen looked at her, and turning to him (Mr. Rotch), not knowing who he was, said, 'Here is a case of Cholera!' with a smile on his countenance. He (Mr. Rotch) immediately said, 'You presume that she has not been a Cholera patient?' 'Oh, absurd—ridiculous!' was the reply. At that time the gentleman never asked one question. He (Mr. Rotch) enquired whether he was distinctly to understand, that from the appearance of the girl the gentleman was satisfied that she had never had the Cholera; to which he replied, 'Most decidedly; certainly, never!' He (Mr. Rotch) told the gentleman that he was extremely glad to hear him make the statement he did: by which he presumed the gentleman thought he meant he was glad to find they had been mistaken about the Cholera; for he again said, 'Perfectly ridiculous!' He then called the attention of the gentleman to the case of Sarah Pooley; and turning to the girl, he asked some off-hand questions. 'Are you sick?' 'No.' 'Do you vomit at all?' 'No.' 'Ah!' said the gentleman, 'and this is a Cholera case!' He (Mr. Rotch) enquired whether the gentleman meant to say that she had never had the Cholera at all; to which he replied, 'Certainly.' Now, this girl's case, ten days before, was one of the worst in the prison. Those being two such flagrant cases, he took the opportunity of saying, that he was extremely glad that the gentleman was so decided, because it corroborated the excellency of Dr. Stevens' treatment. In one case ten days, and in the other only a week had elapsed since the patients were in a state of collapse; and yet the gentleman pronounced that they had never had Cholera. That remark seemed to startle them, for they were not prepared for his (Mr.

Rotch's) deduction; and they asked him who he was. He must say, that their observations, from the beginning to the end, were of the most transient kind. He then walked with them into a ward where there were two men, one of whom was just going into a state of collapse, and the other was in the last stage of the complaint, and afterwards died. The gentleman said that was a case of Cholera, and the only one in the prison. He then called the attention of the gentlemen to the other case, one of whom said that the patient had no more Cholera than he had. He informed them that the medical men belonging to the prison believed that they had had upwards of 100 cases, and they thought that patient would be in a state of collapse in two hours. 'Ah! he is under the saline treatment!' said one of them, laughing. Now, these were facts that had taken place; but when he found that misrepresentations were published in the newspapers, and it was alleged that a false report had been made from the prison, he felt it was time to state facts to the public, and let them know on what grounds the prison report ought to be believed. He (Mr. Rotch) took it for granted that the observations made in the newspapers came from the Privy Council on the authority of those gentlemen, because they appeared the day after they had visited the prison. He (Mr. Rotch) then turned to the first gentleman, and asked him whether he had looked at a case to which he then called his attention. The gentleman looked over his shoulder and said, 'Nothing at all; the man has got the belly-ache. Let us go into another ward.' He was about to leave the room, when he spoke to the third gentleman, who felt the patient's pulse, and said, 'That is a case of Cholera, I have no doubt.' He (Mr. Rotch) then spoke to the first gentleman again, who reluctantly went to the patient, and then said, 'Perhaps it may be a case of Cholera.' They then

went into a ward where there were sixteen male patients, all in a state of convalescence, but some of whom had been in a state of collapse, and recovered. The gentleman laughed, and said, 'I suppose these are all Cholera patients.' He told the gentleman that they were showing them all the patients who had had the Cholera in any degree. The gentleman went to one boy with a ruddy face, and said, 'Had you any sickness?' 'No.' 'Any pain in your legs?' 'No.' The boy thought he meant at that moment, for he had been in a state of collapse. That was the way the questions were put, jeering and laughing from the beginning to the end; that was to say, believing they (the Magistrates) were frightening the public. The gentlemen came there satisfied there was no Cholera. It was due to Dr. Stevens, and all connected with the establishment, that the public should know how much value to put on the report laid before the Privy Council.

"A Magistrate enquired whether the gentlemen from the Privy Council did not ask questions of the medical men.

"Mr. Rotch replied, that the medical men and nurses were all present,* but no questions were asked of them. He did not think the medical men were treated with the respect which they ought to have been; and one of them† left the prison before they had gone through the whole of the wards. He (Mr. R.) felt for him, and could excuse any man for acting as he did.

"Sir Peter Laurie.—Are not the names of all visitors taken down? You know who these gentlemen were?

"Mr. Rotch replied that he did not know their names. He understood that one of them was Sir David Barry.

* Dr. Stevens was not present.

† This was Mr. Crooke, who left the prison at that moment in deep disgust.

“ Sir Peter Laurie.—They went sneering and laughing through the whole prison ?

“ Mr. Rotch replied that his complaint against the three gentlemen was this—that they came to the prison—that they went through it with haste incompatible with the importance of the mission they were sent upon—that they did not ask those questions that in his opinion were calculated to draw forth proper data to enable them to go back to the Privy Council, and state that they had only seen two cases of Cholera in the prison.”

Our next witness to the conduct of the inquirers is Mr. Chesterton, the Governor of the prison. That gentleman was present at the Quarter Sessions, but, as a matter of course, took no part in the discussion that occurred on “ County day ” relative to the Cholera ; and as no one dreamt of requiring any corroboration of Mr. Rotch’s testimony, which was plainly beyond all suspicion, Mr. Chesterton was asked no questions on the subject. He, however, was present at the “ enquiry ” in the prison by Messieurs Barry, Maling, and M’Cann, and also at a previous flying visit paid to Coldbath-fields the day before by Dr. Barry alone. When the publication of the “ notes ” took place, Mr. Chesterton appears to have felt astounded to such a degree that, forsaking professional reserve, he wrote and published a letter in the “ Medical Gazette,” dated the 25th of July, 1832, in which he says—

“ I think it somewhat unreasonable, that a hasty inspection on their part of about half an hour on two successive days, when the disease was manifestly on the decline, should appear to justify so serious an accusation against the Surgeon, and indirectly against others, of fabricating accounts of Cholera which never existed, for the purpose of magnifying the skill of one professional man. . . . When Sir David Barry visited on the 27th of June, he saw, he says, no case of Cholera : but on the 28th he acknowledged to have seen two cases. Now, the disease had existed since the 3rd of June, and if the short space of twenty-four hours could produce this change, even in the decline of the disorder (when the wards were crowded chiefly with persons very slightly affected, or who were retained from the fear of premature dismissal), what number, even by a parity of reasoning, may not even that ratio have exhibited since the 3rd ? But on the 27th, when it was said no Cholera existed, a man named Harris was in the infirmary, who, two days before, was in the worst imaginable state, and momentarily expected to expire. This was the report to me of my Infirmary Turnkey, who had himself seen upwards of twenty deaths from Cholera, and was, therefore, well acquainted with the disease. The Surgeon, on the 27th and 28th, would certainly designate that case one of Cholera ; and who can doubt the propriety of doing so, since the least neglect would have assuredly produced relapse ? Although the remedies had worked a favourable change, the man was decidedly in a critical stage of the disease. Others there were under similar circumstances ; but I mention the case of Harris because it was an extreme one. On the 29th, a prisoner of the name of Allen was in a state of collapse ; I remained in the infirmary upwards of three hours with the Surgeons, who devoted so much time to that man, so urgent was the case considered to be. Transfusion was resolved upon, and

repeatedly tried in vain. The tube could not be introduced into the vein, and the patient was left to the ordinary saline remedies: his recovery was despaired of; but the next morning the pulse had returned, many of the urgent symptoms had abated; and that man also was precisely in the state of Harris, and might, with equal justice, on the succeeding day, have been denied to be a case of Cholera.

“Surely, then, Sir, if enquiry were demanded, and truth the object to be elicited, instead of the hasty deductions drawn from half an hour’s inspection (whereby Dr. Stevens, Mr. Wakefield, and all concerned with this place, have been exposed to sinister observations), a more matured investigation, and a calmer discussion of the number of cases, and merits of the treatment, ought, in common justice, to have been adopted. The evidence of the medical men should have been treated with more respect, and the testimony of disinterested witnesses (whose sad experience has, alas! forced upon them some judgment in this disease, and who could, at least, have deposed to facts)—these, I say, should have been consulted before the reputation of professional men was assailed, and the statements of others impugned. Permit me to say, Sir, ‘more in sorrow than in anger,’ that we who really know what has occurred, and consider *facts* alone, can hardly conceive it possible that a grave and momentous question should be thus decided. The attendants and nurses know that upwards of twenty patients have, on this last occasion, recovered from the state of collapse under the saline treatment. Many of these cases I saw prior to my leaving town for a few days, and since my return; and yet, with the full knowledge of such facts, that professional rivalry should operate against the real truth of the case, is indeed deplorable.”

It would evidently be work of entire super-erogation to add to the evidence now adduced

one tittle of further proof touching the time bestowed by Messrs. Barry, Maling, and M'Cann upon the investigation of the Cholera in this prison. Mr. Rotch does not state the length of time occupied by the enquiry, but he declares that "they went through it with haste incompatible with the importance of the mission they were sent upon." Mr. Chesterton, however, helps us to the precise time occupied by the enquiry, which it appears in his evidence amounted to half an hour, extended over two days, some portion of that very brief space having been spent by Dr. Barry on the day previous to the official inspection that resulted in the "notes." If we suppose, for the sake of argument, that Dr. Barry's visit on the 27th of June to the prison occupied ten minutes, and surely it could not occupy much less, then we shall have twenty minutes as the entire space of time occupied in the official enquiry of the 28th. And that that was in reality the time really so expended on this important mission, the result of which has, in all probability, seriously affected the health of many thousands, can be proved beyond all doubt by living testimony of a character far above suspicion. Well, then, might the individual who suggested or insisted upon the addition of the caveat to the "notes," make that singular document declare that the subject matter of the "notes" was strictly confined to

the "moments" of the inspection. That enquiry indeed had to do with moments and not with hours : it did not occupy even half an hour, and was in point of fact begun and ended, or rather huddled through, in the manner described by the witnesses, at the railroad pace of twenty minutes !

On the evidence, then, of two credible witnesses, corroborated in most important particulars, we have shewn that the report or "notes" is unworthy of credit, from the enquiry having been confined to a space of time obviously quite inadequate for the purpose. And here it is impossible to refrain from stating, that the conduct of the Privy Council, in accepting such a document without calling before them its authors, and demanding from them an explanation of its statements, and particularly of its caveat postscript, was most reprehensible. If the document were ever read by the Privy Council, at all events its postscript must have escaped notice, for we cannot think so meanly of the understanding of the Privy Council of that day as to believe that any of them could have read such a document and passed over in silence its extraordinary revelations.

We cannot help saying, also, that the Lords of Council were not the only parties blameably silent in regard to this very suspicious public document. The medical journals of the day ought to have unmasked it : it was due from them to the profes-

sion, whose interests they advocate, that they should have shewn to the public that medical enquiries were not such mere shams, that to conduct them, or rather for their concoction, or, as "The Railway King" might say, their "cookery," twenty minutes might suffice. The medical journals of the day appear to have accepted the notes, caveat and all, without the least examination, as trustworthy public documents; and the effect of that has been, that a specific for a disease that, treated on any other plan defies all medical skill, has been derided as quackery—convicted of being such after a solemn official enquiry.

Secondly, the notes have evidently been concocted in a bad spirit. They themselves betray their *mala fides*. For example, we find Dr. Barry, in the preliminary letter to the editors of the journals in which he published them, saying: "I beg it to be understood that I am actuated by no wish to impede, and, indeed, I have no motives to oppose the full and fair development of the merits of any medicine, *but more especially of culinary salt in Cholera*, having myself given a favourable report of its use in that disease so long ago as the 30th of July last year." Dr. Barry considers it right to represent the saline treatment, which comprehends, as we have seen and as he well knew, the exhibition of several of the neutral salts, together with the most assiduous

application of subsidiary remedies, simply as the employment of "culinary salt!" The tendency of such a misrepresentation could only be to excite contempt against the treatment in the minds of those who might not penetrate the flimsy veil of so shallow a detraction. In the same spirit we find the "notes" speaking of a medical gentleman who was as competently educated as any of the persons subscribing the document—one, too, who had had more practical experience of Cholera than the whole of them put together—"as a young man of colour!" That most uncourteous and very rude style of writing occurs in the following passage of the "notes:"—"1st *Ward visited*.—Nine patients. One man who had been four days under the saline treatment for premonitory symptoms had been attacked this morning, after having been discharged from hospital. A genuine case. Attempts were making, by a *young man of colour*, to introduce the tube for saline injection into one of the veins at the bend of the arm, under the direction of Mr. Wakefield." The "young man of colour," the subject of so vulgar an attempt at detraction, was Mr. Crook, the assistant of Dr. Stevens in treating the Cholera patients of the prison, and to whom, as we have seen, the Magistrates of Middlesex, in Quarter Sessions, voted the thanks of the county and a piece of plate in gratitude for his skilful and meritorious services.

Here, too, the conduct of the Privy Council and of the medical press of the day must be admitted as having been very reprehensible ; indeed both the one and the other were accessories after the fact to the perpetration of a most gratuitous and most vulgar insult upon a highly-meritorious and unoffending individual. Nay, the Privy Council and the medical journals of the day are directly censurable as responsible for the insult in question. The Privy Council authorised the publication of the “notes,” and the medical press supplied the medium of publication. Probably, no Privy Council nor any portion of the press were ever set to do dirtier work.

The “notes,” or rather the fringes to the “notes” as we may call Dr. Barry’s preliminary letters, pretend to reduce the numbers of Cholera cases that had occurred in the prison to a very small figure—to an amount indeed quite insignificant. For the purpose of exposing the trickery or “cooking” of these misrepresentations, we shall here deal with them as regards the first irruption of the disease, viz., the period from April the 5th to May the 11th. Referring to this, Dr. Barry in his letter states as follows :

“With regard to the number of Cholera cases which occurred in Coldbath-fields prison from the 2nd to the 26th of April this year, or during what has been called the first irruption of the disease into that establishment, I find that *twenty-four* cases only, and seven deaths, were reported to the Central

Board. Not having had an opportunity of seeing any of those cases myself, I shall abstain from making any further remark upon them than this—that the prison, during the period referred to, was repeatedly visited by Dr. M'Cann, the Medical Superintendent of the district, and that he has officially reported to the Central Board, that he had every reason to believe that no greater number of cases of Cholera than twenty-four had occurred in the prison."

The principal medical reporter to the Board of Health from Coldbath-fields would be as a matter of course the Surgeon, Mr. Wakefield. How far it can be true that twenty-four cases of Cholera only and seven deaths occurred in the prison between April the 5th and April the 26th, Mr. Wakefield himself shall show. We find him (*vide* page 29) writing of date April the 25th as follows :

"We have now upwards of twelve hundred persons in this prison; and from the commencement of the disease up to this date, there have been *nearly a hundred cases* where individuals have been more or less evidently labouring under the influence of Cholera poison. Twenty-five of these assumed the malignant character of the disease, having the majority of the symptoms described in the printed document issued by Dr. M'Cann. Four of the first cases, as before observed, were treated in the common way, and every one of them died. All the others, however, were immediately put under the use of the saline practice, as recommended by Dr. Stevens, and out of the whole number who have been thus treated, we have only had three deaths from Cholera, and two of these were cases of relapse."

There is a very wide difference indeed between the two statements. In April, Mr. Wakefield himself writes that he has had nearly a hundred cases; in July, Dr. Barry represents him as stating that, in April, no more than twenty-four had occurred. The reader will observe that Mr. Wakefield, in April, states that "twenty-five cases had assumed the malignant character of the disease;" and here we have a key to Dr. Barry's system of Cholera case "cookery." His associate, Mr. M'Cann, it seems, had prepared a canon of Cholera, by which all cases reported to the Board of Health were to be tried. If they agreed with the canon, in not less than a majority of points or symptoms, then they were to be accounted orthodox, and returned as such; but if they could not be brought to agree with the conditions of the canon, then they were to be held as heterodox, and no account taken of them at all. In other words, Mr. Wakefield was ordered to return only to the Board of Health the cases of such patients as were suffering from its last dismal stage, that of collapse.

It was and is the opinion of the Board of Health that the collapse stage of Cholera is incurable by any mode of treatment. What then did the Board of 1832 mean by instructing Mr. Wakefield to report only collapse cases to them? It is to be presumed that the object of directing private practitioners and medical officers of public

institutions to send in statements or returns of the cases of Cholera coming under their care is to afford to the Government the largest amount of information on the subject of the disease which it is possible to acquire, and it is unnecessary to enquire into the utility of such reports, that being self evident, but we ask how such a meagre report as that which Mr. Wakefield was ordered to send in could assist in furnishing any adequate degree of information? Suppose, for the sake of argument, that the disease forming the subject of enquiry had been consumption, what would have been thought of a Board of Health that, professing to be desirous of acquiring every possible degree of information by means of such returns as those under consideration, should have ordered practitioners to return only those cases in which they had indubitably ascertained that the lungs of the patients were in that state of decomposition that the practitioner could almost tell the exact number of inspirations of which they were capable before the sufferers drew their latest breath?

Another most suspicious circumstance connected with the restrictive order to Mr. Wakefield is the fact that *no such restriction was imposed upon any other practitioner*, at least we can find no trace of any such restriction upon any one else in the medical journals of the day. The reader will account for so invidious a distinction in his own way; Mr. Wakefield suffered the order and its

publication in silence, as he did likewise the report of the sham inspection, without offering one word in defence of his statements of the extent and severity of the disease among his poor patients, or of the extraordinary efficacy of the saline treatment.

It has been shown that the other authorities of the prison did not allow the real nature of the sham inspection to remain unexposed. Mr. Chesterton, the Governor, and Mr. Rotch, the Visiting Justice, have proved that the inspection of the prison by the Board was unworthy of one moment's consideration ; also that the disease had existed to a most afflicting extent, and that the result of the saline treatment had been most beneficial. We shall conclude this portion of our statement by adding, from the "Medical Gazette," of August, 1832, the testimony of the then Chaplain of the prison, as follows :

"Having been an eye-witness of the cases which occurred at Coldbath-fields prison, and having had daily opportunities of observing the almost magical effects of the saline treatment, often even *in the worst cases*, I do not hesitate to say, that one lost—thirteen saved.

"Should Providence seem fit to afflict me (which God forbid) with this *awful malady*, could I doubt a moment under what treatment I should choose to be placed ?

"I am, Sir, your faithful and obedient servant,

"JOHN OUSBY,

"Chaplain of the House of Correction for the
"County of Middlesex.

"Coldbath-fields House of Correction, Middlesex,
August 1, 1832."

Mr. Ousby, in stating that in the worst, or collapsed cases, the cures were as thirteen to one death, certainly bears no mean testimony, as he says, to the “magical effects” of the saline treatment; but in reality the proportion of cures was much greater, and yet the Reverend gentleman’s statement was true—according to his means of knowledge. *He was not aware of the fact that the saline treatment had not been used in by far the greater portion of the fatal cases.*

CHAPTER X.

EXAMINATION OF THE BOARD OF HEALTH’S STATISTICS OF THE CHOLERA, IN ITS SECOND VISITATION TO COLDBATH-FIELDS PRISON.

THE report of Messieurs. Barry, Maling, and M’Cann states that there were only two cases of Cholera in the prison on the 28th of June, 1832, the day of their inspection, and Drs. Barry and O’Shaughnessy declare that they had not seen a single case of the disease on their previous visit of inspection to the prison on the preceding day. Messieurs Rotch and Chesterton’s evidence sufficiently proves the absurdity of these statements, but the absolute untruth of there not being a case of Cholera in the prison on the 27th of June, and only two on the 28th, has been placed

beyond a doubt by the Board of Health themselves, in one of their publications in the medical journals of that day, which we insert as follows :

Nominal (A) return of persons attacked with Cholera, in Coldbath-fields prison, from the 26th to the 29th of June inclusive.

Name.	Date of Attack.	Age.	With Diarrhoea, or other Premonitory Symptoms.
Joseph Catanach...	June 26	25	Confirmed Cholera
John Moore	46	Premonitory symptoms
John S. Gower	37	ditto
James Sullivan	18	Confirmed Cholera
James Gravenor...	37	Premonitory symptoms
Thomas Brenner	16	ditto
Thomas Green	19	ditto
Thomas Francis...	17	ditto
Charles Morley	30	ditto
John Brown	20	ditto
Georgiana Harris	18	ditto
Ann Morris	19	ditto
William King.....	„ 27	34	ditto
William Thorn	16	ditto
Godfrey Nokes	19	Confirmed Cholera
Richard Stewart...	29	Premonitory symptoms
Henry King	14	ditto
Henry Butcher	10	ditto
Joseph Jones	27	Confirmed Cholera
Thomas Collins	24	Premonitory symptoms
John Pratt	19	Confirmed Cholera
William White	21	Premonitory symptoms
Caroline Thornton	24	ditto
Elizabeth Leach...	19	ditto
Mary Akermann	29	ditto
Mary Smith	29	ditto
Elizabeth Isaacs...	30	ditto
Mary Bloomfield	22	ditto
Eliza Groves	26	ditto

(Signed)

HENRY WAKEFIELD, Surgeon.

Return (B).

Name.	Date of Attack.	Age.	Remarks.	Collapse.
Ann Smith ...	Night of the 28th.	21	Died at $\frac{1}{2}$ -past 10 a.m., 29th June	Yes
Joseph Allen .	June 29	32	Improving	Yes

To this "nominal return" is appended the following remarks :

"In relating these cases for the information of the Privy Council, I beg leave to observe that the Cholera made its re-appearance in this prison on the 3rd inst., with a degree of malignancy far surpassing the violence of the former attack ; and that during the period between its arrival until the present time, upwards of a hundred cases have occurred with different degrees of severity, out of which number twelve cases have terminated fatally ; but I am happy to add, that the remainder are at this moment in different stages of convalescence, and that the disease appears to be gradually subsiding."

We have regarded this return as a publication of the Board of Health rather than as a statement by Mr. Wakefield, because of the conflicting nature of its contents when compared with existing official statements by that gentleman. The remarks attached to the nominal return state that the disease appears to be "gradually subsiding ;" the return itself states the number of Cholera

cases in the prison on these days at thirty-one, whereas the report of the Visiting Justices of the prison made to the Quarter Sessions, held July 12th, states that "the Surgeon has reported (June 28th) that there are in the infirmaries of the House of Correction appropriated to Cholera fifty-seven males and eighteen females."

Besides, in order still further to shew that the disease did prevail to a most serious extent in the prison on the day in question, we insert the following very remarkable entry by Mr. Wakefield in what may be called the prison order-book :

"28th of June.—In consequence of the re-appearance of Cholera, I have considered it my duty to recommend the smoking of tobacco by the prisoners, and an additional allowance of five ounces of bread and half a pint of gruel in the evening, and the continuance of the extra meat on Saturdays. I have also suggested that the washerwomen and scourers might be allowed a small quantity of spirits every morning and evening. I have recommended the Chaplain to abridge the service, by discontinuing the sermon.

"H. WAKEFIELD, Surgeon."

Surely this document is not easily to be reconciled with the "remark" in the Board of Health's "nominal return" that "the disease appears to be gradually subsiding." The Visiting Justices very naturally accepted the warning of their Surgeon as of the most serious import, and with exemplary

promptitude took steps to prevent, as far as they could, their prison from becoming a nucleus of infection. Accordingly, we find the following in the journals of the day :

*“ Cholera Morbus in the House of Correction, Coldbath-fields.—*The circular, of which the following is a copy, was on Thursday sent to several of the Police-offices in the metropolis :

“ ‘Gentlemen,—The Visiting Justices, assembled this day at the House of Correction, consider it to be their duty to inform you that the Cholera Morbus prevails at this time to a very great extent in this prison.

“ ‘I am, Gentlemen, your most obedient Servant,

“ ‘THOMAS STIRLING,

“ ‘Clerk to the Visiting Magistrates.

“ ‘House of Correction, Coldbath-fields,

“ ‘June 28.’ ”

We cannot account for the “nominal return” but as we have done, by accepting it as a publication of the Board of Health, for we will not do Mr. Wakefield the injustice to suppose that he would publish a statement calculated to represent the number of Cholera patients in the prison at a certain time as thirty-one when eighty-two was the real number. Such a misrepresentation the nominal return was but too likely to produce, because restricted—why or wherefore, no one can tell—to persons attacked with Cholera from the 26th to the 29th June inclusive, and unaccom-

panied by one word to inform the reader that, instead of these thirty-one being the whole of the Cholera patients then in the prison, there were, on the 28th June, at least seventy-five patients with Cholera under treatment, as vouched for by the report to the Magistrates of the Surgeon, Mr. Wakefield, himself.

Returning to the Board of Health's statement that, on the 27th of June, there was not a case of Cholera in the prison, and that on the 28th there were only two, we refer the reader to the "nominal return," one of the publications of the Board themselves, as a test of the truth of so audacious a figment. The nominal return tells us that on the 26th of June no less than twelve persons were attacked, viz., two with "confirmed Cholera,"* that is, they rapidly sunk into the collapse stage, and ten with the second stage of the disease which is here termed "premonitory symptoms." Can it have been possible that the whole of these twelve persons had so entirely recovered in the

* The publications of the Board of Health of this period connected with the Cholera in Coldbath-fields are not very precise in their nomenclature: in the term "premonitory symptoms" was included patients with the second stage of the disease, when cramps, sinking, and coldness had set in; and by confirmed Cholera was meant the collapse stage. The Board appear sometimes to have employed in their forms of returns another distinctive column, which they headed "collapse *without pulse*," and which seems to have been their synonym for *in articulo mortis*.

few hours intervening between their seizure on the 26th and the visit of the principal member of the Board of Health on the following day? We must not only suppose that that was so, but a great deal more of the equally improbable and hard of belief must be supposed and taken for granted if we are to believe that there was no Cholera patient in the prison on the 27th of June. Not only must the twelve attacked on the 26th have been cured instantaneously almost, but there must have been none left under treatment for Cholera from the 3rd, when the disease broke out the second time, to the 26th, the day previous to Dr. Barry's visit. It is difficult to conceive how such a state of things could have been, seeing that we find the "remarks" to the "nominal return," so often referred to, stating that during that period "upwards of a hundred cases have occurred, with different degrees of severity." The statement in the report of the Board of Health to the Lords of the Privy Council tells us that Dr. Barry saw no Cholera patient in the prison on the 27th of June, and as he went there for the express purpose of seeing the Cholera patients, this is equivalent to saying that there was none there. It also asserts that Dr. Barry and his colleagues, Doctors Maling and M'Cann, saw only two Cholera patients in the prison on the 28th, which, under the same circumstances, is equivalent to saying that there

were only two then. If the reader believe all this, then he must believe that the twelve persons attacked on the 26th, and the seventeen attacked on the 27th, and all the rest of the hundred spoken of in the remarks to the "nominal return," were cured with most magical celerity. According to one author, it is possible for all this to be true: we are referring now to Mr. George Ross,* who says—"One cause of the discrepancy may have been the rapidity with which a case of Cholera alters its character. The diseased man of the morning may be the hale man of mid-day; and thus many cases which presented on their first admission into the sick wards unquestionable symptoms of Cholera, may have lost the characteristic signs of the disease in a few hours, and nothing but general debility have remained. A reluctant witness might with such facts find an excuse for scepticism."

If we accept Mr. Ross's apology for these "reluctant witnesses," in what a singular light it places them. Doctors Barry, Maling, and M'Cann either knew what Mr. Ross has just told us of the remarkable character of Cholera or they did not. If they did not, then their ignorance disqualified them from being fit persons to conduct so solemn an enquiry, and they had undertaken

* Correspondence with Dr. Turley, of Worcester, published in "Medical Times," March, 1849.

that for which they knew themselves to be incompetent. If on the other hand they were acquainted with the singularity in the phases of the disease, so unhesitatingly asserted by Mr. Ross, then so much the more blameable was the haste of their inspection, and indeed it would be difficult to characterise their conduct with sufficient reprobation. Inspectors possessed of a knowledge of the rapidly shifting character ascribed to the disease by Mr. Ross, when told, as they were, that there was a great number of cases in the prison, and when shown a number of persons who were described to them as under treatment for Cholera, would hardly have contented themselves with putting a few random questions to the patients *confined to their condition at the moment*. But reluctant witnesses, it seems, might find an excuse for their scepticism in the well-known characteristics of the disease! Surely if these witnesses were to bear testimony touching a matter (of life and death) committed to them for enquiry by the Government, it would be indulging in somewhat lax morality to say that they might find an excuse for scepticism in anything. A witness has no right to be sceptical beyond assuring himself that he say nothing but the truth; but the inspectors of Coldbath-fields were not witnesses, they were judges; and in that condition they appear to have taken care not to

avail themselves of the most ordinary means of informing themselves on the real state of the object of their enquiry; still their functions were judicial, and they are very little benefited by Mr. Ross's questionable apology for reluctant witnesses. It makes one shudder to think that members of a profession on which is devolved the awful responsibility of protecting the public from such enemies as Cholera and other species of pestilence, should be liable, in the very exercise of their most responsible functions, to such eccentricities; nor is it a comfortable fact to find a member of the profession venturing to put forth so very questionable an excuse, and regarding the matter as something so venial as scarcely to require an apology.

The reader is not likely to believe in miraculous changes from disease at morn to hale health at noon, to the extent that would be necessary in order to believe with the Board of Health that there was not a single Cholera patient in Cold-bath-fields prison on the 27th of June, and only two on the 28th. We admit, however, that almost as magical a change as Mr. Ross describes in Cholera has been occasionally witnessed in the disease, when treated under the saline plan; but we never heard of such a change under any other mode of treatment; and probably the reader will not be able to accept it as a generally observed

characteristic of the disease so readily as Mr. Ross does, nor as sufficient to account for the remarkable “discrepancy” between the facts proved by the Board of Health’s own publication, the “nominal return,” and the statements of the report by the inspectors.

There is, indeed, plenty of discrepancies in the several statements connected with the disease in the prison on the 28th of June, the day of the sham inspection. The Board of Health’s publication, the “nominal return,” represents Mr. Wakefield as certifying that on the 26th and 27th of June there were twenty-nine persons attacked, nearly all of whom were cases of premonitory symptoms, while Mr. Wakefield himself reported to the Visiting Justices seventy-five cases of the disease as being in the prison that day; and finally, on reference to the Surgeon’s journal, we find that the number of Cholera patients under treatment on the 28th of June, 1832, was eighty-two. The following classified statement of all the Cholera patients under treatment that day, is extracted from the Surgeon’s journal:

Recovering	...	...	...	...	...	...	...	25
Improved	...	...	...	...	...	...	...	5
Rather better	...	...	...	...	...	...	...	2
Very doubtful	...	...	...	...	...	...	...	2
Better	...	...	...	...	...	...	...	41

Not so well	...	...	...	...	...	...	...	3
Much improved	...	...	...	...	...	...	...	2
Very debilitated	...	...	...	...	...	...	...	1
Dead	...	...	...	...	...	...	...	1
								—
Total	..	...	...	...	...	...	...	82

That eighty-two was the real number is corroborated in some degree by the fact that the prison journal proves that on that day eighty-two Cholera patients were on invalid diet; and it need scarcely be remarked that in respect to diet the authorities of gaols are somewhat particular. But be that as it may, whether seventy-five or eighty-two, or even twenty patients, were under treatment for Cholera on the day in question, it is beyond all belief that, if even only the least of these numbers were true, Dr. Barry could have seen not one Cholera patient in the prison on the 27th, or that the inspectors could only have found two on the 28th, *if they had looked for them*. The variance is only intelligible on the principle of the old adage, that “none are so blind as those who refuse to see.”

As, however, it was the sham enquiry and the mysterious publications of the Board of Health that produced a prejudice which has been strong enough to prevent the just claims of the saline treatment to be considered a specific in Cholera—if indeed there be a treatment for any

disease deserving of that title*—from being recognised, and, what is worse, has prevented so beneficial a treatment from being universally adopted, we shall, at the renewed risk of tediousness, present here nominal schedules of all the patients under treatment in the prison on the 25th, 27th, and 28th of June respectively :

* Such facts as the following but too pregnantly establish the truth of what is here stated. In his lectures on Cholera, Mr. George Ross, of London, had spoken of Dr. Stevens' saline treatment as one of the most unsuccessful modes of treating the disease that had been tried. Dr. Turley, of Worcester, through the same medium in which Mr. Ross's lectures appeared, viz., the "Medical Times," challenged him to the proof of that assertion, and a very interesting correspondence took place between them, in the course of which we find Mr. Ross saying—"The evidence upon which I decline to receive as correct data Dr. Stevens' cases, treated in the Coldbath-fields prison, is now before the profession, and it is for them to decide whether I extended a prudent reserve, or was unnecessarily fastidious in the resolution I adopted. Dr. Stevens talked of *forty* cases; Sir David Barry could not find *one*. Governor Chesterton, on the 28th, reported *seventy* cases; the Government inspector found only *two*. Again, Mr. Wakefield and Dr. Stevens ultimately affirm respectively that *upwards* and *about* one hundred and one hundred and fifty cases occurred. Who are to be credited? The Government inspectors or the prison officers?" Probably, if Mr. Ross should ever peruse these pages, he will not very readily accept as gospel truth any decision founded on a Government inspection without keenly scrutinizing whether the inspection deserved the name, or was merely like that of Coldbath-fields—a mockery, a delusion, and a snare.

List of Cholera patients in Coldbath-fields prison on the 25th of June, 1832, distinguishing those that had been collapsed, and intimating the state of each patient on that day.

Patients that had suffered the collapse stage of the disease are marked C.; all the others had only suffered from the first or second stages of Cholera.

Name of Patient.	When Admitted.	State of the Patient on that day.
B. Grundy (C.)	June 16	Very doubtful
Sarah Pooley (C.).....	" 1	Gradually improving
Ann Moore (C.)	" 1	ditto
Ann Easton (C.).....	" 1	ditto
Julia Ingall (C.)	" 1	Not so well
John Morris (C.).....	" 16	Recovered, and acting as nurse
Robert Collins (C.)	" 17	Better
John Shannon (C.).....	" 17	Recovered, and acting as nurse
John Akers (C.)	" 18	Very doubtful
F. Dubois (C.)	" 18	Better
Clara King (C.)	" 18	Worse
John Murphy (C.)	" 19	Gradually recovering
Wm. Brown (C.)	" 20	Rather better
Susan Kelly (C.)	" 20	Much the same
Ann Lambert (C.)	" 20	ditto
George Ludman (C.) ...	" 20	Better
Wm. Brown (C.)	" 20	ditto
Edward Blacklock	" 21	ditto
James Royer	" 21	ditto
Charles Bradley	" 21	ditto
Joseph James	" 21	ditto
M. Holland	" 22	ditto
John Musetta	" 22	ditto
T. Hollingbury	" 22	ditto
Wm. Barrett	" 22	ditto
Thos. Lawrence	" 22	ditto

Name of Patient.	When Admitted.	State of the Patient on that day.
John Harris (C.).....	June 22	Worse
Wm. Hemming (C.) ...	„ 22	Much the same
George Carnie	„ 22	Better
Wm. Bryan.....	„ 22	ditto
Solomon Taylor (C.) ...	„ 22	Worse
Joshua Thorn	„ 22	Recovering
Richard Jackson (C.)...	„ 22	Doubtful
James Holdwell	„ 22	Not worse
George Pickering (C.)...	„ 23	Better
James Simmonds.....	„ 23	ditto
James Carter	„ 24	ditto
Wm. Edwards (C.).....	„ 24	ditto
Thos. Bleasdon	„ 24	Not so well
J. Shuttleworth (C.) ...	„ 24	Better
Eliza Williams (C.) ...	„ 24	ditto
Elizabeth Ward (C.) ...	„ 24	
Ellen Connor (C.)	„ 24	
James Herring	„ 25	Doubtful
James Hanby	„ 25	ditto
Henry Cooper	„ 25	ditto
James Card (C.)	„ 25	Very bad
Thos. Kirby (C.).....	„ 25	Died at 10 p.m.
John Razin (C.)	„ 25	Died at 12.30 night
Wm. Davidson (C.).....	„ 25	Better
C. Dunbar (C.)	„ 25	ditto
Alex. Jessie (C.).....	„ 25	ditto
Daniel Holland (C.) ...	„ 25	ditto
Wm. Rowland.....	„ 25	Doubtful

Number of collapse cases, 34 ; number of non-collapse cases, 20 ; number of patients with Cholera in the prison infirmary on the 25th of June, 1832, 54.

List of Cholera patients in Coldbath-fields prison on the 27th of June, 1832, distinguishing those that had been collapsed, and intimating the state of each patient on that day.

Patients that had suffered the collapse stage of the disease are marked C.; all the others had only suffered from the first or second stages of Cholera.

Name of Patient.	When Admitted.	State of the Patient on that day.
Bridget Grundy (C.) ...	June 16	Better
Sarah Pooley (C.).....	" 7	ditto
Ann Easton (C.).....	" 13	ditto
Ann Moore (C.)	" 12	ditto
Julia Ingall (C.).....	" 25	ditto
John Morris (C.).....	" 16	Recovered, and acting as nurse
Robert Collins (C.).....	" 17	Discharged cured
John Shannon (C.).....	" 17	Recovered, and acting as nurse
John Akers (C.)	" 18	Recovering
F. du Bois (C.)	" 18	ditto
Clara King (C.)	" 18	ditto
John Murphy (C.)	" 19	Ditto gradually
Wm. Brown (C.)	" 20	Very feeble
George Sudman (C.) ...	" 20	Recovering
Wm. Brown (C.)	" 20	ditto
Susan Kelly (C.)	" 20	Better
Ann Lambert (C.)	" 20	Recovering
E. Blacklock	" 20	ditto
James Roger	" 21	ditto
C. Bradley	" 21	ditto
Thos. James	" 21	ditto
M. Allen	" 22	ditto
John Musetta	" 22	ditto
T. Hollingsbury	" 22	ditto
Wm. Barrett	" 22	ditto
T. Lawrence	" 22	ditto
John Harris (C.)	" 22	Very bad
Wm. Hemings (C.) ...	" 22	ditto

Name of Patient.	When Admitted.	State of the Patient on that day.
George Corme.....	June 22	Recovering
Wm. Bryan.....	" 22	ditto
Solomon Taylor (C.) ...	" 22	Not so well
Joseph Thorn (C.)	" 22	Recovering
Richard Jackson (C.) ...	" 22	ditto
James Holdwell	" 22	ditto
J. Shuttleworth (C.) ...	" 23	Worse
George Pickering (C.) .	" 23	Recovering
James Simmonds	" 23	ditto
James Carter	" 24	ditto
Wm. Edwards.....	" 24	ditto
T. Bleasden	" 24	ditto
Elizabeth Williams (C.)	" 24	ditto
Elizabeth Ward (C.) ...	" 24	ditto
Ellen Connor (C.)	" 24	ditto
James Allen.....	" 25	Better
James Manby	" 25	ditto
Henry Cooper	" 25	ditto
Richard Card (C.)	" 25	Very bad
W. Davidson	" 25	Better
C. Dunbar	" 25	ditto
Alfred Sessie	" 25	ditto
D. Holland	" 25	ditto
Wm. Rowland	" 25	ditto
E. Kerry (C.)	" 25	Doubtful
Ben. Pheasey (C.)	" 25	ditto
Alfred Miles.....	" 25	Better
Jane Taylor (C.).....	" 25	Recovering
A. Richardson (C.).....	" 25	ditto
James Catanach (C.) ...	" 26	ditto
John Moore.....	" 26	ditto
J. S. Gower.....	" 26	ditto
James Sullivan	" 26	Doubtful
James Gravener	" 26	Better
Thos. Brenner.....	" 26	ditto
Thos. Green.....	" 26	ditto

Cases of collapse, 33 ; cases of non-collapse, 31 ; number of patients in the prison infirmary on the 27th of June, 1832, 64.

List of Cholera patients in Coldbath-fields prison on the 28th of June, 1832, distinguishing those that had been collapsed, and intimating the state of each patient on that day.

Patients that had suffered the collapse stage of the disease are marked C.; all the others had only suffered from the second stage of Cholera.

Name of Patient.	When Admitted.	State of the Patient on that day.
Bridget Grundy (C.) ...	June 16	Better
Sarah Pooley (C.).....	" 1	Recovering
Ann Easton (C.).....	" 1	ditto
Ann Moore (C.).....	" 1	ditto
Julia Ingall (C.).....	" 25	ditto
John Akers (C.).....	" 18	ditto
F. du Bois (C.)	" 18	ditto
Clara King (C.)	" 18	ditto
John Murphy (C.)	" 19	ditto
Wm. Brown (C.)	" 20	Rather better
George Sudman (C.) ...	" 20	Recovering
Susan Kelly (C.).....	" 20	ditto
Ann Lambert (C.)	" 20	ditto
E. Blacklock	" 21	ditto
James Royer	" 21	ditto
C. Bradley	" 21	ditto
Joseph James	" 21	ditto
M. Allen	" 22	ditto
John Musetta	" 22	ditto
T. Hollingsbury	" 22	ditto
Wm. Barrett	" 22	Better
Thos. Lawrence	" 22	ditto
John Harris (C.).....	" 22	ditto
W. Hemmings (C.).....	" 22	Much improved
George Carnie.....	" 22	ditto
Wm. Bryan.....	" 22	Better
Solomon Taylor (C.) ...	" 22	ditto
Joshua Thorn (C.)	" 22	ditto

Name of Patient.	When Admitted.	State of the Patient on that day.
Richard Jackson (C.)...	June 22	Better
James Holdwell (C.) ...	" 22	ditto
J. Shuttleworth (C.) ...	" 23	ditto
George Pickering (C.) .	" 23	Not so well
James Simmonds	" 23	ditto
Wm. Edwards	" 24	ditto
Thos. Bleasden	" 24	ditto
Eliza Williams (C.) ...	" 24	ditto
Elizabeth Ward (C.) ...	" 24	ditto
Ellen Connor (C.)	" 24	Improved
Joseph Allen (C.)	" 25	ditto
James Manby (C.)	" 25	ditto
Henry Cooper (C.)	" 25	ditto
Richard Card (C.)	" 25	ditto
Wm. Davidson (C.) ...	" 25	Better
C. Dunbar (C.)	" 25	ditto
Alexander Sasse	" 25	Recovering
Daniel Holland	" 25	ditto
Wm. Rowland.....	" 25	ditto
Edward Kerry (C.).....	" 25	Died 8.45 p.m.
Alfred Miles	" 25	Recovering
Jane Taylor (C.).....	" 25	ditto
B. Pheasey (C.)	" 25	Very doubtful
A. Richardson (C.).....	" 25	ditto
John Catanach (C.) ...	" 26	ditto
John Moore.....	" 26	Recovering
John S. Gower	" 26	ditto
James Sullivan	" 26	Better
James Gravener	" 26	ditto
Thos. Brenner (C.) ...	" 26	Not so well
Thos. Green (C.)	" 26	ditto
Georgina Harris	" 26	Better
Ann Morriss	" 26	ditto
Thos. Francis	" 26	ditto
Wm. King	" 26	ditto
C. Murley	" 26	ditto
S. Brown	" 26	ditto
Wm. Thorn.....	" 27	ditto
Godfrey Nokes	" 27	ditto

Name of Patient.*	When Admitted.	State of the Patient on that day.
Richard Stewart	June 27	Better
Henry King.....	" 27	ditto
Henry Butcher	" 27	ditto
Joseph Jones	" 27	ditto
Thos. Collins	" 27	ditto
John Pratt	" 27	ditto
Wm. White... ..	" 27	ditto
Joseph Green	" 27	ditto
Thos. Sturn.....	" 27	ditto
Caroline Thornton	" 27	ditto
Elizabeth Leach	" 27	ditto
Margaret Smith	" 27	ditto
Elizabeth Isaacs	" 27	ditto
Mary Bloomfield.....	" 27	ditto
Elizabeth Graves.....	" 27	ditto
Cases of collapse, 37 ; cases of non-collapse, 45 ; number of patients in the prison infirmary on the 28th of June, 1832, 82.		

* The transcriber from the prison books has made a slight variation in the names of some of the patients: perhaps, indeed, the inaccuracy exists in the books themselves. The following are instances:—On the 25th of June a patient is named "Carnie," and on the 27th "Corme;" on the 25th one appears as "Jessie," on the 27th as "Sessie;" and "Sudman" of the 25th appears as "Ludman" on the 27th.

CHAPTER XI.

DR. STEVENS APPLIES TO GOVERNMENT FOR A REAL INVESTIGATION, AND IS REFUSED.

FROM being much engaged in preparing to leave England Dr. Stevens did not find leisure to adopt any course of action relative to the sham enquiry of the Board of Health until the 8th of September, when he addressed a request to the Privy Council, setting forth the inaccuracy and misrepresentation of the pretended investigation, and requesting a thorough investigation of the facts connected with the Cholera in Coldbath-fields prison. The following are the passages of his memorial connected with the Cholera :

“ Soon after my arrival the Cholera made its appearance in England ; and from the close analogy in the state of the blood in the advanced stage of yellow fever and this new pestilence, I was led to conclude that a similar treatment might be applicable to both. I have now had ample opportunities of trying this practice in Cholera ; and from what I have seen of the disease in its varied forms, I am certain that the administration of simple saline matter is better able to counteract the effects of this pestilence than any other means that has yet been used.

“ Up to the 27th of June, the saline practice had been rapidly advancing in public estimation ; but at that period an

event occurred equally inauspicious to its just merit and to the public welfare. On that day Sir David Barry visited the prison at Coldbath-fields, where there were many Cholera patients, most of whom were, and others had been, successfully treated with saline medicines. The rapid cure which this treatment effects, when rightly administered, had removed nearly the whole of them from the precincts of death; from which happy circumstance Sir David took occasion to declare that there was no Cholera in the prison, or, in other words, that he had not seen one case of that disease in the whole establishment. But the utter incorrectness of this statement (to use the mildest expression), may be proved by witnesses who had seen more, and were much better acquainted with the cases, than Sir David Barry.

“Next day, Sir David Barry paid his second and last visit to the prison; and on this occasion he found three of the patients so ill that he was forced to confess the existence of Cholera amongst the prisoners. On his return to Whitehall-place, however, the Central Board of Health publicly announced that there were, at that time, only three cases of Cholera in the whole of the said prison; but it can be proved by the most positive evidence to your Lordships that, according to the established usage of reporting cases, there were then in the prison not less than from sixty to seventy patients, the whole of whom would have been considered Cholera cases in any Cholera hospital in the kingdom. Now, if this statement shall be found to be correct, your Lordships will admit that Sir David Barry was guilty of a gross act of injustice, not only to the medical individuals connected with the prison, but to the whole nation, and even mankind in general; since, by his official mis-statements, he has prevented or obstructed the adoption of a salutary practice.

“There is another fact, to which I most respectfully but earnestly solicit your Lordships' consideration, namely, the

deleterious operation of opium in persons attacked with Cholera. It is susceptible of the clearest proof that the administration of that drug, unhappily urged by the Central Board, is one chief cause of the prevailing mortality; and I firmly believe, that for one death caused by the disease itself, two at least may be ascribed to opium and stimulants. Hence those practitioners who abstain from these, and use cold water alone, are comparatively much more successful than those who treat Cholera with opium and the other improper remedies recommended by the Central Board. That such is the fact is evident by the numerous successful cases which are cured by cold water alone, and to prove that opium cannot cure the disease, I have only to refer your Lordships to the Bills of Mortality.

“Notwithstanding the misrepresentations that have been made against me, I may venture to assure your Lordships that in presenting this memorial I am actuated by motives which are neither mercenary nor vain. I am on the eve of embarking from this country, possibly for ever, and have no favours to ask. Since my arrival in England, I have sought, without fee or reward, to benefit those of my fellow-creatures who were labouring under a new, but most malignant disease; I see with regret that the most unjustifiable obstacles are thrown in the way of the public good, and that, too, chiefly by individuals who are liberally paid for watching over the public welfare. I doubt not that truth and justice will ultimately prevail. But the Cholera is now raging in almost every town and village of the British empire, while many are dying that, by proper treatment, might be saved; and this evil will continue, probably, for a long period, unless your Lordships shall command an immediate investigation on this subject. I trust, therefore, that, for the sake of truth and suffering humanity, your Lordships will be pleased to appoint an impartial Commission to enquire

into the facts relative to the cases of Cholera at Coldbath-fields; but, above all, into the value of the saline remedies in the treatment of the epidemic which is now so fatal in this country.

“I have the honour to be,

“With much respect,

“Your Lordships’ obedient Servant,

“WILLIAM STEVENS, M.D.

“No. 157, Albany-street,

“Regent’s Park, Sept. 8, 1832.”

The above memorial produced no effect upon the Privy Council, and perhaps it was not so happily contrived to that end as it might have been. Had it simply pointed out the ridiculously inadequate space of time spent on the pretended enquiry, and drawn the attention of the Privy Council to the mysterious absurdity of its caveat postscript, perhaps even their Lordships might have been moved to suspect that some jugglery had been played off in the “notes” and in the whole conduct of the sham enquiry: as it was, the following letter from the Clerk of the Council clearly enough conveys how little impression the memorial produced upon their Lordships:

“Council Office, Whitehall,

“18th September, 1832.

“Sir,—I have to acknowledge the receipt of your letter of the 8th inst., relative to what you consider an incorrect announcement made by the Central Board of Health as to the

cases of Cholera in Coldbath-field prison, with a statement of the success which has attended the use of saline medicines administered by you to the Cholera patients in that establishment, as well as Yellow Fever in the West Indies; and requesting that the Lords will appoint a Commission to enquire into the facts.

“ In reply, I am directed to state to you, that in consequence of a paragraph in the ‘Globe’ evening paper of the 27th of June, announcing ‘that upwards of one hundred persons had been attacked with Cholera, within the twelve previous days, in the Coldbath-fields prison,’ their Lordships were induced to call upon the Governor of that establishment for a statement of facts as to the paragraph alluded to, when he replied, ‘that the medical attendant of the prison is not now in the way,’ but ‘the number of persons now labouring under the disease in its various degrees is about seventy.’

“ This alarming report induced their Lordships to direct a deputation of medical gentlemen, viz., Sir David Barry, M.D., Deputy Inspector-General of Hospitals, Maling, and Staff-Surgeon, Dr. M’Cann, to visit the prison on the 28th of June, from whose report their Lordships were satisfied that there were then very few cases of decided Cholera in that establishment,—a fact which was confirmed a month afterwards, by the Governor’s reply to their Lordships, transmitting an official report from the chief medical officer of the prison, dated 28th of July (copies are enclosed), by which it appears that fifty-nine cases (only) of ‘*decided Cholera*’ had occurred in the prison from the commencement of the epidemic, on the 3rd of June, up the 28th of July.

“ I am directed further to state, that their Lordships are not inclined to take into consideration disputes on the differences of opinion of medical men, in reference either to the symptoms or treatment of the disease termed Cholera.

“ Their Lordships, however, will be much gratified to

learn, that the success of your particular practice has been confirmed by extensive experience, and by the concurrent testimony of other medical men ; but they do not consider it expedient, at present, to appoint a Commission for the purposes stated in your letter.

“ I am, Sir, your obedient Servant,

“ C. GREVILLE.”

The first thing that strikes us as out of order in the missive of the Privy Council is the statement that their Lordships, *in consequence of a paragraph in the “Globe” newspaper*, should have called upon the Governor of the prison for information relative to the Cholera. Their Lordships had instituted a Board of Health, consisting of a sufficient number of medical celebrities, and a numerous and expensive staff of medical officers ; in such circumstances it seems suspicious that a newspaper paragraph should have so moved their Lordships, and we come to the conclusion either that the medical staff of the Board of Health had neglected to visit Coldbath-fields prison, or that they had not made any report of its condition to their Lordships. The reader may adopt another alternative, that the Privy Council reposed less confidence in the medical staff of the Board than they attributed importance to a newspaper paragraph.

In the third paragraph it is stated that, having directed Drs. Barry, Maling, and M’Cann to

visit the prison on the 28th of June, "*from their report their Lordships were satisfied that there were THEN very few cases of decided Cholera in that establishment.*" Let us suppose that there had not been one patient labouring under what their Lordships call "decided Cholera" during the twenty minutes spent by Drs. Barry, Maling, and M'Cann in their rapid march through the prison infirmary, apparently the Lords would have been satisfied that there were no cases of Cholera in the prison. But the cloven foot peeps out under the veil of the adverb *then*, and we cannot avoid suspecting that the inventive genius that devised so happy a salvo for professional scruples, as the caveat postscript to the "notes" had the merit of suggesting the insertion of that saving word. Doubtless its object was the same as that of the caveat. It was intended to save the writer from the responsibility of directly asserting that which the "notes" at length were clearly intended to convey, viz., that there had been little or no Cholera worth mentioning in the prison.

But their Lordships overlooked the important fact, that their directions did not limit the inspectors of the 28th of June to the THEN state of the disease; their instructions were clearly for a comprehensive enquiry. They directed Dr. Barry, taking other medical officers with him, "to enquire into the particulars of the disease

said to be prevailing in that prison ;” and now, in the reply to Dr. Stevens’ memorial, we find their Lordships expressing their satisfaction at an enquiry of twenty minutes’ duration, and confined in every respect, and in the most absolute degree, to the moments when the patients flitted before the eyes of the enquirers ! Surely this is being very easily satisfied : to be content with little is a highly-prized moral quality ; but it is not admirable if it be the result of the most confiding indifference. Of course, the honourable Clerk of the Council and their Lordships are far above all suspicion of complicity in the THEN mystification, but both the one and the other ought to have been alive to its defiant non-compliance with the order of the Council.

Mr. Greville adds, apparently as if to convince Dr. Stevens that the Privy Council had paid great attention to the facts and circumstances of the case, that the chief medical officer of the prison (Mr. Wakefield) had reported fifty-nine cases of “decided cholera” only as having occurred in the prison from June 3rd to July 28th. Had the Privy Council not indulged so fatally in an extraordinary facility of taking everything connected with certain medical reports for gospel, and as requiring no examination, they must have discovered abundance of discrepancy between this return of fifty-nine cases on the 28th July and the

statements of former reports. Had they referred to the "nominal return" of the 28th June they would have found Mr. Wakefield reporting that there had been in the twenty-five days intervening from the 3rd of that month nearly 100 cases. Surely it ought to have struck even a very inattentive examiner as something passing strange that, after an additional period of thirty days, with the disease prevailing in the prison all the while, not only no addition should have been made to the hundred cases of June 28th, but they should actually have dwindled down to fifty-nine !

It is not an explanation of this mystery that the return of July the 28th only regards "decided Cholera." If by that term were meant collapse cases, then we find that from the 2nd of June to the 28th of July, eighty-two patients had suffered from that stage of the disease, and we are compelled again to refer the reader to the only suggestion we could offer explanatory of the discrepancy, viz., the fact that Dr. M'Cann had propounded a Cholera canon, and that Mr. Wakefield had been ordered to report no cases but such as presented "a majority of the symptoms" therein laid down. Anything more absurd is scarcely conceivable: suppose a patient brought from the cell in the dawn to the infirmary in a state of collapse, scarcely breathing, and only just alive, the symptoms of cramp, vomiting, and

purging have worn themselves out, and only the pulseless exhaustion of complete collapse being presented, according to the order on Mr. Wakefield he would have been justified in not reporting this as a case of Cholera, because in his opinion it did not present a majority of the symptoms of the canon.*

The answer to his memorial probably convinced Dr. Stevens that he had nothing to hope for in the way of enquiry from the Government, but, at all events, he had the satisfaction of knowing that the saline treatment was making its way, notwithstanding the heavy blow which its reputation had received from the publication, by the Board of Health, of the report of the sham enquiry and the unreasoning faith with which the suspicious statements of that document had been received and adopted by many of the profession, and especially by the medical journals of the day. We must here except from this unqualified condemnation the "Medical Gazette," which, although it inserted the "notes" of the sham enquiry, caveat

* The following are the words of Dr. M'Cann's Cholera canon: "A purging and vomiting of fluids, neither feculent nor bilious, with cramps, prostration, to which in extreme cases are added a coldness, and shrinking, and lividity of the surface, particularly of the extremities, with suspended pulsation at the wrist, and suppression of urine. Those cases were to be considered only as Cholera patients who had at least a majority of the above symptoms, as children may have the other symptoms without cramps."

and all, without exposure of their intensely superficial character and utter worthlessness, yet did not, like too many of its contemporaries, reject honest testimony, borne by eye-witnesses of the saline treatment in indignant protest against the "notes." For example, we find in the "Medical Gazette" the following letter from the Chaplain of the prison :

"To the Editor of the 'London Medical Gazette.'

"House of Correction for the County of Middlesex,
"28th of August, 1832.

"Sir,—Between my leaving town, on the 11th of this month (Saturday), and my return, on Tuesday morning, 21st, I learned that twenty-three cases of the Cholera had passed through the infirmaries of this prison; and since that time, to this morning, Tuesday, the 28th, nine cases more, most of whom have returned to the convalescent ward. Those in the infirmaries are apparently doing well. I lament to say we have lost one man; so that, in addition to my statement, August 1st, under saline treatment, one lost, thirteen saved,* I have now the happiness to state, out of thirty-two cases, one lost, thirty-one saved.

"I beg leave to express how astonished I am, that with facts of so overpowering a nature, medical men and others should be so blinded, so incredulous, so obstinate, so infatuated, almost everywhere, as to run about and tell us that in this new disease they either know not what to do, or are so wedded

* We repeat that Mr. Ousby was not aware of the fact that the saline treatment had not been adhered to in many cases attended by a fatal result, and therefore, even his low statement of mortality exceeds the reality.

to ancient prescription, and the authority of some school or other, that they will suffer their patients to die rather than adopt a practice so efficacious in its salutary operation, and almost infallible in its beneficial results.

“ I am, Sir,

“ Your most obliged humble Servant,

“ JOHN OUSBY.

“ Chaplain for House of Correction for the
County of Middlesex.”

We shall conclude this section of our history by stating that there was no want of informative means regarding the ravages of Cholera in Coldbath-fields prison, and that the Privy Council were not left, as one might suppose, to acquire their information from newspaper paragraphs. Mr. Chesterton, in his letter formerly inserted, says: “ In the official return to the Secretary of State for the preceding year, the total number of deaths in this prison during twelve months was *sixteen*; and within one little month, from the 3rd of June, on this last melancholy occasion, the Cholera within these walls proved fatal to the *same number*.”

Undoubtedly this exhibits a comparatively high increase of mortality, but we may imagine the fearful height to which it would have extended, had Divine Providence not so ordered it that the prison was saved in a great degree from the fatal effects of the empirical treatment recommended

by the Board of Health. As it providentially happened,* the following was the remarkable result of the saline treatment in the prison :

Patients treated on the saline plan, from	
April 5th, 1832, to December, 27th,	
1832.....	467
Died	4
Cured	463—467

Thus showing the rate of mortality to have been less than one per cent. There were treated on other plans during the same period in the prison thirty-six patients, all of whom died. Surely it is a melancholy illustration of the value of Government supervision, to find facts like these obscured and nullified by miserable devices like the “ notes ” and the mysterious postscript.

* It is not being profane to use such a term here, seeing that Dr. Stevens' presence in Great Britain at the outbreak of Cholera was a fortuitous incident.

CHAPTER XII.

FURTHER APPLICATIONS TO THE BOARD OF HEALTH AND THE GOVERNMENT FOR AN INVESTIGATION INTO THE SALINE TREATMENT OF CHOLERA IN COLDBATH-FIELDS PRISON. THE CHOLERA BREAKS OUT IN JAMAICA.

DR. STEVENS remained abroad for many years, but returned to reside in England before the second visit of the Cholera to Great Britain in the year 1848-9. The metropolis was more severely afflicted by that visitation than it had been in the year 1832, and the epidemic also raged with great severity all over Great Britain and Ireland. Dr. Stevens, during the height of the disease in London, went there from the country to endeavour once more to procure due consideration of the saline treatment by the Board of Health. That body had been greatly changed since the year 1832, and Dr. Stevens was in hopes that the new medical chiefs of the Board would have acceded to his request, but he was mistaken. His request was courteously declined, and instead of an enquiry into the result of its application in Coldbath-fields prison, in 1832, the Board promised that if Dr. Stevens would describe his treatment fully, it should be applied in a certain number of cases under the

superintendence of the Board's medical officers. Dr. Stevens declined that offer, leaving the Board to make any trial they pleased of the new treatment. He represented that the trial had been extensive enough, and far beyond the practice necessary to test any treatment. Nor was it necessary for him to describe his practice: that had been fully done in 1832, both in his work on the blood and in the medical journals of the period, so that the Board had it in their power to apply it when they pleased.

Although repulsed in this high quarter from his benevolent attempt to benefit the poor sufferers from Cholera, Dr. Stevens had the satisfaction of knowing that the saline treatment was extensively in use among the profession, and was also constantly hearing that wherever it was honestly and carefully applied, the result was quite as favourable as had been the case in Coldbath-fields prison. This kind of information even occasionally reached him from quarters unfriendly to the saline treatment: for example, Mr. George Ross, who declined to take the Coldbath-fields cases into consideration, because he believed that they had been proved to be unworthy of credit by a competent Government enquiry, writing to Dr. Turley, in March, 1849, says:

“I have recently had the pleasure of a correspondence with Mr. Alexander Leckie, of Bonhill, Dumbartonshire,

who, since the 14th of January, 1849, has treated twenty cases of Cholera by salines, with only two deaths. One of the patients that recovered took fifty grains of calomel, in ten grain doses, in the course of three hours. This was the only case in which calomel was administered. The doses of the saline treatment were as follow:—Sodæ carb. ℥ij.; sodæ chlorid, ʒi.; potas. chlorat. gr. viij. Aq. q. s. Ft. Haust. There was no consecutive fever in any of the cases. Mr. Leekie says: ‘I have only had two deaths; one of which, a dissipated woman, was far advanced in the collapsed state before I saw her. I put her under the saline treatment, with frequent draughts of cold water, and the other appliances as above (viz., friction, mustard-poultices, and jars with hot water.) She rallied so far as that the pulse could be felt at the wrist, and was getting warm, when her daughter stealthily commenced feeding her with whiskey, after which she sunk and died.’”

The irruption of the pestilence in 1849 was very severe in many parts of Great Britain and Ireland, but nothing like so fatal as an attack which broke out in Jamaica towards the close of the autumn in the following year. The mail of December, 1850, brought most alarming intelligence of the state of that island. Its capital (Kingston) in the course of a few weeks, had lost several thousands of the inhabitants by Cholera, and the disease was moving about in all directions triumphantly, setting the usual modes of treatment completely at defiance. The profession in Jamaica adhered, generally speaking, to the treatment of the Board of Health. They sought to combat one poison by others: opium and calomel

were in such request that the supply in the island of these drugs was speedily exhausted, and it is probable that some of the poor patients may have owed their lives to that fact.

From Jamaica a cry came to England for assistance, especially in a medical point of view. The merchants of London connected with the West Indies presented a memorial to the Earl Grey, Secretary of State for the Colonies, setting forth the deplorable condition of the island, and praying that Government would instantly send medical assistance to its relief. The memorial met with only a slight measure of sympathy. Earl Grey's answer to the memorialists appeared in the "Times" of January, 1851, and it stated that prior to the reception of the memorial, the Government had directed the attention of the Board of Health to the alarming intelligence of the progress of the Cholera in Jamaica, and his Lordship inclosed a copy of the reply of the Board. In that document the Board of Health stated, that in all probability the virulence of the disease would have spent itself before medical assistance could arrive from England; and it added, "THE MEDICAL EXPERIENCE OF EUROPE ENABLES US TO STATE, THAT FOR THE COLLAPSE STAGE OF CHOLERA THERE IS NO CURE!"

It was impossible for Dr. Stevens to remain silent under the circumstance of such a declaration. Its disheartening character and deadening

influence at once occurred to him as capable of exerting a most malignant effect, not only in Jamaica, whither this most sinister dogma was about to be instantly despatched, but in every place where the disease might break out, and where the renown of British science had penetrated. He, therefore, once more resolved to press upon the Government the necessity of according an enquiry into the saline treatment and its results. He accordingly wrote to Earl Grey, earnestly protesting against the most alarming and most groundless dogma of the Board of Health, and pointing out that, instead of its being true that the medical experience of Europe taught any such disheartening truth as that Cholera in the last stage was incurable, it was a fact that had been proved in hundreds of instances in one public prison of London alone, that the disease, instead of being incurable, was, under the saline treatment, attended by no higher a rate of mortality than one per cent. And it was especially sought to be impressed upon Earl Grey, that the truth of this assertion could be proved in a few hours, owing to the facility for an enquiry presented by the proximity of the scene of so great a curative triumph.

Again the well-intentioned efforts of Dr. Stevens were fruitless. A cold intimation of the reception of his communication to Earl Grey, from the Under Secretary of the Department, was all

the notice taken of the matter by Government. Jamaica was treated very much on the *laissez faire* system ; and although some medical aid was sent out to the island, it was rather to teach how the disease might be prevented prophylactically than treated and cured in the bodies of the affected.

Dr. Stevens was not the only member of the profession who protested against the above deplorable dogma of the Board of Health. We find in the "Times" of the day following that on which Earl Grey's answer to the West India Merchants' memorial appeared, a letter addressed to the Editor by Dr. Bowie, formerly one of the Cholera inspectors to the Board of Health : that gentleman pointed out the disheartening effect of such an authoritative announcement—as calculated to prevent all exertion. He also declared the absolute untruth of such an assertion, by reminding the Board of Health that while in office as one of their Cholera district inspectors, he had reported, both in the attack of 1831-2 and in that of 1848-9, numerous cases in which patients had recovered from the collapse stage of the disease.

The result of the applications by Dr. Stevens, and of this exposure of the grievous misconduct of the Board of Health by one of their own officers, would almost reconcile one to a belief in

fatalism. That result was *nil*: apparently not even the publicity afforded by the most influential journal in Europe to Dr. Bowie's straightforward denunciation of the gross error of the Board of Health, nor its important statements, nor the urgent nature of the subject, could secure for it the slightest degree of public interest. The press ignored its existence; even the medical journals took no notice of it; and the Board of Health treated it with silent contempt. It seemed as if the Government, the profession, the press, the general public, and, lastly, the members of the Board of Health themselves, had agreed that the acts of the latter were infallible, and as little to be questioned as Papal rescripts. Of course there is a mystery connected with this remarkable and studied silence. We believe it to have been one of those apparently unarranged and unpreconcerted events, in which the degree of previous concert and management is found to have been in proportion to the seeming absence of these very things, just as your joker's most careless and unpremeditated *impromptu* has cost him the most elaborate concoction. Time will perhaps reveal why the Board of Health were allowed to fulminate doctrines which, were they to operate in a degree proportionate to their authority, would, in respect to Cholera, deaden every generous impulse, and incase mankind within an impervious indifference.

CHAPTER XIII.

THE MALIGNANT EFFECT OF THE SHAM ENQUIRY
UPON THE SALINE TREATMENT EXTENDS TO THE
PRESENT DAY.

It would be easy to adduce numerous instances in which the result of the Government inspection of Coldbath-fields prison infirmary exerted a malignant influence upon the new treatment. Two will suffice for our present purpose: in one, it will be seen that a teacher of medicine accepted the sham enquiry as having utterly damaged the reputation of the saline treatment, and as having disproved the statements of its success, published by the Surgeon of the prison and others; in the other instance, the reader will remark that a practitioner, of high standing in the profession, was so convinced that the Board of Health's report had proved the worthlessness of the new treatment, that he endeavoured to prevent its application in a Cholera hospital during the attack of 1849, and even went the length of remonstrating with the Surgeon in Ordinary and the Consulting Surgeon of that hospital on their having determined to give it a trial, at the same time denouncing it as condemned quackery and mere "tomfoolery."

We have already referred to the correspondence between Mr. George Ross, Surgeon to the Western Dispensary of London, and Dr. Turley, of Worcester. Mr. Ross is the medical teacher just referred to, and the evidence of the effect upon his mind of the pretended Government inspection of Coldbath-fields prison infirmary, consists in the fact that, in constructing tables of the comparative mortality and cures under various modes of treatment in London, he altogether left out of consideration the cases that had occurred in that prison, and on being asked why he had so omitted them, his answer was, "Because the Government inspection had proved that no reliance could be placed in the statements of Dr. Stevens, Mr. Wakefield, or the authorities of the gaol." We insert here one of Mr. Ross's tables, based upon a table framed by Mr. F. De Grave, for the city of London :

"CITY OF LONDON.

Treatment.	Number of Cases.	Deaths.	Deaths per Cent.
Combination of salts, used at Greville-street Hospital...	26	8	30·77
Calomel	75	35	46·66
Miscellaneous	17	8	47·06
Calomel and opium	196	112	57·14
Opium	81	47	58
Stimulants	63	42	66·66
Combination of salts, pro- posed by Dr. Stevens ...	25	22	88
Venous injection	20	18	90

“*Salines*.—A short comment on the foregoing table may serve to bring out the facts in more distinct relief. By the table we find that the saline treatment as practised at Greville-street was highly successful, and as a contrast with the received mode of treatment by calomel and opium, and stimulants, I may state that at Greville-street the mortality by the latter system was as high as 78 per cent., and in the city, according to the above table, it rose to a very high figure. The formula employed at Greville-street was—Carb. soda, ℥ij.; sodii chlorid., ʒij.; potass. chlorat., gr. viij.; aq. q. s. pro haust. This draught was given about every quarter of an hour. The patient was also placed in a hot saline bath at 120°, in which 14lbs. of salt were dissolved. Cold water was drank *ad libitum*.”

As has been stated (*vide* foot note, page 109), Dr. Turley, of Worcester, elicited from Mr. Ross that he considered that the Government inspection had proved the Coldbath-fields' cases to be unworthy of confidence. We shall now shew upon what authority he stated that the mortality under Dr. Stevens' saline treatment had reached the fearfully high proportion of 88 per cent., as shewn in the preceding table, or of 76 per cent., which he stated in a general synopsis of treatment and mortality of Cholera, as the result that had attended Dr. Stevens' saline treatment. It appears that Mr. Ross arrived at these results from a consideration of eighty-eight cases treated on the new plan, and having been called upon by Dr. Turley to state where and when

these cases had occurred, Mr. Ross answered as follows :

“I beg to reply, that twenty-five of these cases were treated in the city of London, under the jurisdiction of the Local Board, and were reported to the Central Board by Mr. F. De Graves ; the remaining sixty-three cases were treated in the hospital of Dr. Egeberg, at Christiana, in Norway, and first appeared in the ‘Eye,’ a medical periodical in Christiana, in an able series of communications from Dr. Vetter.”

The twenty-five cases alleged to have been treated on the saline plan were under the care of Mr. A. Tweedie, who up to June, 1832, was a great admirer of the saline treatment. Mr. Tweedie published communications on Cholera in April and June, 1832, in the “Medical Gazette” of those dates, and in the latter he stated particulars of two cases wherein the saline injection into the veins had not been successful. He also then gave an account of some cases that were treated on the new plan at Greville-street hospital, in May, and although he brought forward two cases of failure under the saline treatment, still he says, on the other hand, “As an offset to the above cases, it may be stated that Mr. Whitmore has had in all *about thirty cases of Cholera since he commenced the saline treatment, and of this number he has lost only two.* One of these cases was that of a man who was brought into the Greville-street

hospital in the very last stage of Cholera, and died soon after admission." He adds also, "In addition to these, there have been lately, in the same hospital, *seven cases of Cholera, six of which were very severe.* They have all been under the saline treatment, four of them have been dismissed cured, and the other three are now considered as out of danger."*

Mr. Tweedie was the Resident Surgeon of Abchurch-lane Cholera hospital, and Dr. Stevens, on the application of Mr. De Grave, Medical Secretary to the City of London Board of Health, consented to undertake the introduction of the saline treatment into that hospital, stipulating, however, that his assistant, Mr. Crook, should reside in the hospital to insure the utmost care in the application of the treatment. The following statement is derived from the correspondence of Dr. Turley and Mr. Ross :

"On the 2nd of August, Mr. Crook went to the City Hospital, and at noon on the following day a new case of Cholera was admitted into that establishment. The name of this patient was Margaret Hinchie, aged twenty-five. She had been suddenly taken ill, and was sent to the hospital as a Cholera patient by Mr. Miles, a respectable Surgeon of Broad-street. When first admitted, this woman had severe premonitory symptoms and cramps, but she was not yet in a state of collapse. According to the agreement, Mr. Crook

* "Medical Gazette," June, 1832.

wished to take charge of this case, but in this he was disappointed, for Mr. Tweedie told him that this was not the kind of case in which the saline treatment was to be tried, for that he himself could easily cure this patient with opium, stimulants, and the other remedies recommended by the Central Board of Health. He added, however, that as soon as a really bad case—that is, a patient dying from Cholera—came in, Mr. Crook might then try his new treatment on such a case as soon as he pleased. Mr. Crook said that the present was a well marked case of Cholera—that the agreement of the City Board with Dr. Stevens was, that the saline treatment was to be tried on the first twelve cases of Cholera admitted after twelve o'clock on the preceding day. But this observation made no impression on the mind of a man who knew that he was acting wrong. Mr. Crook's first determination was instantly to quit the hospital, but, on reflection, he determined to remain and watch the result of Mr. Tweedie's narcotic and stimulating treatment in this case. As already stated, this patient had been admitted on the 3rd of August, and the moment that Mr. Crook saw that the woman was in a hopeless condition, he intimated to Mr. Tweedie his candid opinion of the treatment that both he and the poor patient had experienced, and before leaving the hospital, he expressed his firm determination never to enter again into such a den of iniquity as the Cholera hospital in Abchurch-lane. On the following day, Dr. Stevens went to the City Board, related to the medical members of that establishment what had occurred, and announced his intention of having nothing more to do with any experiment in their hospital, being satisfied that any benefit effected by the saline medicines during his presence would be counteracted by the Physicians to the hospital, when he might not be there to protect his patients from the foul play of those who were evidently acting under the evil influence of the medical

members of the so-called Central Board of Health. When Dr. Stevens made this communication to the City Board, one of the members (Dr. Roupel) proposed that Mr. Tweedie should be dismissed from the hospital; others, in the opposite interest, refused to consent to this proposal; and Dr. Stevens put an end to the discussion by declaring that, as Mr. Crook had determined never to enter their hospital again, he also must beg leave to decline having anything more to do with any establishment that was evidently so completely under the control of the Central Board of Health."

After this view of Mr. Tweedie's conduct in regard to the saline treatment, it will scarcely be necessary to say that the statement of twenty-five of the cases now under consideration, coming from such a source, clothes it with a most suspicious aspect. It is clearly not to be relied upon; although perhaps the official form in which it came before Mr. Ross might have authorised him in making the use of it which he did.

The sixty-three cases from Norway are not much more trustworthy. The statement in the "Lancet," from which Mr. Ross derived his information respecting them, describes as a part of the treatment the exhibition of "laxative salts, rhubarb, &c.," which never formed a part of Dr. Stevens' treatment; and in these, singularly enough, Mr. Ross omits to state that the saline treatment was only applied by Dr. Egeberg in the most desperate cases of collapse. No fair judgment

could be formed of the value of the saline treatment from failure in such cases ; and, therefore, if we consider the whole materials on which so strong a condemnation of the saline treatment by Mr. Ross has been formed, every impartial mind must, we should say, be of opinion that the accepted condemnation of the saline treatment by the sham Government enquiry had disposed Mr. Ross to believe anything to the discredit of the treatment on slender enough grounds, and to adduce statements highly derogatory to its reputation, without much previous enquiry into their truth or falsehood. Mr. Ross, in justifying his treatment of the Coldbath-fields' cases as apocryphal, also refers to Dr. Barry's statement, that Dr. Stevens had allowed that the former had seen no patients labouring under Cholera on the 27th of June in Coldbath-fields. The best proof of the utter inaccuracy of Dr. Barry's statement is to be found in the details of the disease on that day, furnished in the preceding pages.

Unhappily the same distrust that was engendered in Mr. Ross's mind by the publications of the Board of Health, was as widely diffused as it has endured long ; and although one may well wonder that the internal evidence of the worthlessness of the sham enquiry contained in the official documents themselves should have escaped notice, yet there is no denying the effect

produced—an effect not confined to the day of the sham enquiry itself, but continued down to the present time, as we are now about to shew by referring to cases connected with the Cholera hospital of the city of Worcester, in the year 1849.

In the month of July in that year the Cholera appeared in the city of Worcester, and its appearance was met in the promptest manner by the Board of Guardians of that Union. The city was divided into districts under the special care of medical practitioners, and a Cholera hospital was constructed in an airy situation at a short distance from the city. Dr. Stevens happening to reside in the neighbourhood, the Surgeon of the hospital and the Board of Guardians requested his assistance, which was at once acceded, on the condition that the patients received into the hospital should be treated on the saline plan. At first there seemed no difficulty in the way: the Surgeon in charge of the hospital, Mr. W. D. Mitchell, at once agreed to give the treatment a fair trial, and in this he was cordially seconded by the Consulting Surgeon, Mr. H. D. Carden. It happened, however, that the saline treatment, from peculiar circumstances, did not receive a fair trial even there. Most of the patients had been treated more or less for the disease before they were sent to the hospital, and calomel,

opium, brandy, and even sugar of lead, formed the greatest portion of the *materia medica* employed in the previous treatment. The result was that the Choleraic symptoms were in general speedily subdued, after the patients' arrival in the hospital, by the saline treatment; but the previous treatment, or variations from the saline, left a melancholy legacy of consecutive disease, from which almost none of the patients recovered.

Perhaps if it had not been for the malignant influence of the sham Government enquiry, the district practitioners now referred to would, far more generally than they did, have applied the saline treatment to their patients. Some of them did apply it with the happiest effect, but in many quarters the saline treatment was regarded with anything but favour, and the Board of Health's poisonous treatment was far more generally preferred. Nor need we wonder that such should have been the case with the mass of practitioners, when we find how the sham enquiry had affected one of the principal members of the profession in that locality against the saline treatment—inducing him even to take the extraordinary step of so far interfering with the treatment of the patients, as to remonstrate with the Surgeons to the hospital against its employment. The writer is prepared to prove that the day after the Surgeon to the hospital took charge of that

institution, Dr. Hastings (now Sir Charles) told him that he might as well treat his patients with a little cold water, or nothing at all, as on the saline plan. Next day, and indeed as often as he met that gentleman during the continuance of the epidemic, Sir Charles Hastings returned to the subject, strongly urging the impropriety of his following the saline treatment, which he said was downright “tomfoolery,” *and had been condemned by the Board of Health*. In vain the Hospital Surgeon expressed his confidence in the saline treatment from its success so far as it had gone; Sir Charles refused to listen to such statements, and also declined to meet Dr. Stevens at the hospital. Nor did he confine his remonstrances against the employment of the saline treatment to the Surgeon in Ordinary of the hospital—he repeated them to the Consulting Surgeon, and declared to that gentlemen that the treatment was tomfoolery, and it was time that it should cease.

All this is stated to illustrate the effect of the sham enquiry in creating a most malignant prejudice against the saline treatment, even in circles where one would suppose the judgment on such subjects would only be formed from the most careful examination of trustworthy premises. How fatally it was capable of influencing the more excitable classes of society was proved by an

occurrence in this very hospital. Mr. Mitchell having occasion to write to Dr. Stevens on the 26th of July, 1832, says incidentally: "The prejudice against your remedies seems to have been strong latterly amongst the patients, one woman, since dead, having requested me not to give her any salt powders."

The woman here referred to as having become prejudiced against the saline medicines was named Walker. She was received into the hospital on a Saturday morning, in the middle of July, almost in a state of collapse, but speedily rallied under the saline treatment. She was so far recovered by mid-day as to be able to sit up in bed, and even to converse cheerfully with the Chairman of the Board of Guardians, Mr. Bennett, of Worcester, of whom it would be remiss in us did we not here state that his exertions to meet the pestilence were indefatigable, and that the city of Worcester was most deeply indebted to him for his courageous and enlightened philanthropy during the visitation. The woman shewed no prejudice nor want of docility till the evening, when she refused to take her saline draught, and spoke of the "salt powders" in such a way as clearly to shew that some one had prejudiced her against them. Melancholy to relate the Board of Health's practice was adopted on her absolute refusal to continue the salines, and the result was her death and burial within a few hours.

The Chairman of the Board of Guardians deemed—and we thought at the time and still think properly—that an enquiry ought to be made into the cause of Walker's death, in order that it might be ascertained how it was that the prejudice was excited in her mind against a treatment that had had so miraculous a healing effect upon herself. But we regret to add that on proposing a motion to that effect to his brother Guardians he met with no encouragement, and so the matter was permitted to drop, and Dr. Stevens refused to practise in an hospital where such deeds were allowed to be done. The refusal to enquire is deeply to be regretted, since it must have been beneficial to have detected the manner in which the poor victim was induced to disobey her medical attendant, and even to refuse to take the prescribed medicines. Such an enquiry would also have shewn to poor ignorant persons like herself the extreme danger of listening to any one who could be reckless enough to visit the hospital for the purpose of interfering in matters with which they had no right to meddle.

It is also very clear that the fatal obstinacy of this poor woman may be laid at the door of the sham enquiry. Dr. (now Sir Charles) Hastings, the chief local Physician, as we have seen, believed that enquiry to have been a genuine investigation,

and therefore freely expressed his opinion in denunciation of the saline treatment. Some one probably heard that denunciation who ascribed to it as great a degree of authority as Sir Charles Hastings seems unfortunately to have attached to the Government decision, and so the circle of misrepresentation widens till it comes to the ears of such patients as poor Mrs: Walker, they drink in the poison, because it comes from their betters, and we have seen the result.

Another victim of interference with the saline treatment perished in this hospital, or, at least, was removed only to die. Charles Farr was a nurse in the hospital. He was seized during the night-time, and prescribed the saline medicines for himself until he saw the Surgeon in the morning. Poor Farr having seen the beneficial effects of the saline treatment, expressed his confidence in it; and, although his attack was one of great severity, he was emerging beyond the dark shadow of the disease, when, for some inexplicable reason, the Board of Health treatment was conjoined with the saline. The latter had killed the Cholera, but the other, as usual, brought with it a consecutive fever, which killed the patient. An enquiry into the cause of death in this case also would have been beneficial by proving, as in all probability would have been the case, that the saline treatment was changed, owing to a prejudice

conceived against it by the medical chiefs of the hospital arising from the sham enquiry. Those gentlemen, it may be said, ought to have been aware of the real character of the Government enquiry; but there is this excuse for them, that the entire press of the country, including the exclusively medical portion, had accepted the enquiry as genuine, or, which had the same disastrous effect, they permitted it to pass over as if they had no reason to question its genuineness. Private practitioners, in such circumstances, might well have been deceived; and the fact teaches a great moral lesson, that, in matters of importance, the judgment ought to be informed only from the best sources, and that great care should be taken to ascertain that no reasonable doubt can exist of these only having been consulted.

CHAPTER XIV.

THE SALINE TREATMENT IN GREVILLE-STREET HOSPITAL: FICTION OF A SECOND SALINE TREATMENT ALLEGED TO HAVE BEEN PRACTISED THERE.

HAVING now sketched the history of the saline treatment in the scene of its greatest triumph, and shown how unworthily it was met by the

Board of Health, and also proved that the effect of the latter was not only seriously damaging to its reputation in the year 1832, but that its sinister influence continues in active operation down to the present time, we shall add some particulars in the history of the new treatment, presented by its application in other public institutions of the metropolis and elsewhere.

An extensive practice of the new treatment took place in the Free Hospital, Greville-street, then under the care of Mr. William Marsden, M.R.I., who was first induced to give it a trial, after having seen its successful results, by Mr. Whitmore, an experienced practitioner in the neighbourhood of the hospital. Mr. Whitmore was intimately acquainted with the new plan of treatment, and Dr. Stevens, on being applied to, readily agreed to assist him in a trial in that hospital. The Governors of the hospital insisted on its being tried, but Mr. Marsden yielded a very reluctant consent. He had previously even gone so far as to term the treatment "empirical trash," and positively refused to have anything to do with its application. On the 20th May, 1832, he sent for Mr. Whitmore to treat a patient, whom he had previously treated unsuccessfully in the customary manner. The patient was already in the collapse stage when Mr. Whitmore saw the case, and Dr. Marsden

admitted that a recovery could not have been hoped for under any mode of treatment with which he was acquainted. In the presence of one of the Governors, Mr. Whitmore applied the saline treatment, and in less than three hours the patient had so far rallied as to be pronounced out of danger.

The subsequent experience of Greville-street hospital was so conclusive of the efficacy of the saline treatment that we shall, at the risk of tediousness, detail some of the particulars connected with the first case treated on the new plan in that institution. The following note was addressed to Dr. Stevens from Mr. Whitmore, and refers to that case :

“Coldbath-square, 21st May, 1832.

“Dear Sir,—I was called up last night by Mr. Marsden, the Surgeon of the institution in Greville-street, and a very active Governor to the same, a Mr. Claines, saying they had just taken in a case of Cholera, and were anxious I should superintend the case, subjecting it to the same treatment which had succeeded in the prison. It is the devil's own case (I don't mean my Cholera patient); very many eyes are upon us, aye, and illnatured ones too; the success or otherwise which we meet will do much in establishing or condemning your plan of treatment. Do you think it worth your while to see the patient with me to-day? or, in other words, can you make it convenient? And if so, send word by the bearer, my son, what time you will call here, and I will accompany you.

"The case is in the Frec Hospital, Greville-street, Hatton Garden. You may recollect that this is the hospital where I told you the saline treatment had been tried unsuccessfully.

"I am, dear Sir,

"Yours very truly,

"H. WHITMORE.

"To Dr. Wm. Stevens."

Dr. Stevens promptly attended at the hospital, and the case referred to above happily terminated most successfully, re-action having been established from a complete state of collapse, and the patient pronounced saved within three hours. After having witnessd nine recoveries in ten severe cases, Mr. Marsden's dislike of the saline treatment vanished, for it was afterwards applied by him in a great number of cases, most of which were in the collapse stage, with the happiest results, as appears from the following extract of a communication by that gentleman to the "Medical Gazette," published on the 10th of October, 1832 :

"It is right to remark that the saline treatment in this hospital was first adopted by Mr. Whitmore, of Coldbath-square, on a patient that was abandoned by myself as a hopeless case,* although this person recovered, and by the like plan many lives were prolonged, yet no uniform success ensued until the saline powders were faithfully administered every fifteen minutes, night and day, with an unlimited

* The case referred to above.

quantity of cold water. Hot saline baths were an important auxiliary ; in fact they never failed in relieving the cramps and exciting extreme circulation, and thereby diminishing the lividity of the extremities.

“In every attack of the disease that was not followed by purging and vomiting, all remedies were found perfectly useless, as all such individuals died generally within six, never exceeding eight hours, from the seizure, which, to me, affords ample illustration of the important effects of vomiting and purging in the collapsed stage of the complaint, or even in the early stages, when the function of the liver is arrested. It is worthy of remark, that out of thirteen patients, from ten to twenty years, only one was lost, and this died after a long struggle, having been injected nine or ten times with a saline fluid, rallying more or less after each addition to the venous fluid, the pulse being perceptible at the moment of death. In the 345 cases there was not one who had bilious diarrhœa.

“From the above facts it is quite evident that until the saline medicines, hot saline baths, and water without limitation was steadily and faithfully administered, almost every case in the second stage* of the disease terminated fatally, while, on the other hand, of those patients who had not been treated previously by other remedies, but with whom the saline only had been pursued, almost every one survived, as the preceding report sets forth. [It stated that *out of eighty-one cases in a state of collapse only seven died.*]

“With the above facts before me, I must be not only blind to justice, but to all sense of honour and candour were I not publicly to acknowledge that, until this treatment, suggested by Dr. Stevens, was forced upon my notice by stubborn facts, I not only treated it with disdain, but with

* Dr. Marsden classes the collapse as the second stage of the disease.

determined opposition ; yet I feel that I have been amply repaid, inasmuch as I have been taught a salutary lesson never again to treat with indifference the suggestions of any man without due reflection and careful investigation. Notwithstanding all the conflicting opinions that have appeared respecting Dr. Stevens' hypothesis, whether true or false I care not, but I do feel that to him alone is the profession and the public indebted for the path he has opened, the beacon that he has lighted, in the vast labyrinth of humoral diseases, for the new era that has commenced in both the pathological and the therapeutical sciences, and for having thus cleared the threshold and opened the gates from whence we view the distant light glimmering over the darkness of past ages, yet sufficiently bright to stimulate every scientific enquirer to a thorough investigation of this unknown portion of diseases."

Nor did Mr. Marsden appear only once as the eulogist of the saline treatment ; for in his work on Cholera, published in 1834, we find him saying—"Upwards of three hundred patients, suffering from the second stage of Cholera, have been admitted into the hospital ; at first nearly every one died, although every plan of treatment that could be suggested was adopted ; and it was only in despair that a mode of treatment recommended by Dr. Stevens was tried. Through the effects of that treatment a glimmering ray of hope was first discovered, and on which the practice now pursued and laid down in the following paper has been devised ; and on this plan alone do I believe it possible for the life of a single patient to

be rescued from the second or collapsed stage of the complaint."

It will be observed that in his later testimony in favour of the saline treatment Mr. Marsden is infinitely more chary in his praise of Dr. Stevens than in his earlier communication. In 1832 he emphatically declares that "to him alone are the profession and the public indebted for the saline treatment;" while in 1834 he restricts Dr. Stevens' share in the credit of so great a discovery to his having produced "a glimmering ray of hope." But this was not the whole length to which Mr. Marsden went in his forgetfulness of the source whence he derived the saline treatment: we shall find him in the sequel coolly accepting and even publishing in his own book an attribution of the entire credit of the treatment to himself, accompanied by a most gross misrepresentation of the result of what is there called Dr. Stevens' treatment. But we can forgive this remarkable instance of forgetfulness for the value of the declaration, which we find him making in his work of 1834, in page 15—"Some of the very worst cases have been restored both by the saline medicine and by the saline injection, and so completely do I rely on the success of these remedies for combating this extraordinary disease, that one no longer views with horror and dismay the approach of this enemy to human existence."

The following highly favourable testimony to the efficacy of the saline treatment was also borne by Mr. Marsden in a report to the City Board of Health, which we extract from the "Lancet," of February 2nd, 1833. The report includes all the Cholera patients admitted in the Free Hospital, Greville-street, up to the 12th of October, 1832, with the modes of treatment and the result. We confine ourselves to the cases of collapse:

"One hundred and eighty-four patients afflicted with malignant Cholera, in the second stage—that is, having no pulsation at the wrist, livid extremities, &c. &c.

"Of this number seventeen died, either on their way to the hospital, or immediately after their admission, no medicine having been administered.

"Eighteen were treated by various plans, previously to the introduction of saline remedies, of whom thirteen died, and five recovered.

"Thirteen, who were treated by the above plans, were, after all hope of recovery was lost, injected with the saline solution, at the temperature of one hundred and ten degrees. Eleven died and two recovered.

"Twenty-three were treated, in the first instance, by calomel and opium, brandy, ammonia, external stimulants, &c., without success; afterwards by the saline treatment. Eighteen died and five recovered.

"Of twenty-eight, who had taken freely of opium and brandy previously to their admission, but afterwards put on the saline treatment, twenty-one died, and seven recovered. Of four, who were aged and previously diseased, treated by saline remedies only, all died. *Of eighty-one who were*

treated by the saline remedies alone, seven died and seventy-four recovered."

It is to be remarked that the result of the several varieties of treatment here specified, in which the saline medicines were given in conjunction with or after other plans had been tried, is not chargeable on Dr. Stevens' treatment, and therefore the following analytical summary shows the true state of the case :

Total number of collapse cases	184
Whereof died before any treatment	17
Ditto from the effects of age and other diseases ...	4— 21

163

	Died.	Recovered.	
Treated in mixed modes 82, whereof	63	19	
Treated on saline plan 81, whereof.....	7	74	
	—	—	
Total	70	93	163

The mortality attending the Board of Health's and other modes of treatment, not Dr. Stevens', of collapsed cases, is thus shown to have been 63 in 82, or 80 per cent.; while the mortality attending the saline treatment was only 7 in 81, or $7\frac{1}{2}$ per cent.

With such facts fresh in the recollection of experienced members of the profession, and above all in that of the gentlemen whose practice was so

blessed by the saline treatment, is it not astounding to find Mr. Marsden, Mr. Wakefield, and others maintaining a rigid silence when the Government of the country is made the mouth-piece of the Board of Health's most untrue, and most fatally mischievous declaration, THAT THE MEDICAL EXPERIENCE OF EUROPE HAD ENABLED THEM TO DECLARE THAT FOR THE COLLAPSE STAGE OF CHOLERA THERE IS NO CURE?

Before quitting the experience of Greville-street hospital, it is necessary to advert to a very ungrateful feature in the history of the saline treatment. A claim was set up in a very artful manner in the end of the year 1832 in favour of Mr. Marsden as having invented a second saline treatment, and it is with regret that we are compelled to add that Mr. Marsden not only permitted that claim to be publicly preferred without exposing its fallaciousness, but actually accepted it as unquestionably well founded by inserting it in his own work on Cholera, published in 1834. The nature of the claim in favour of Mr. Marsden to be considered as the author of the second, and infinitely the best, saline treatment will be understood from what follows. Among other documents published by the Central Board of Health, was a table affording a comparative view of the various modes of treatment adopted in Cholera within the jurisdiction of the City of London Board of

Health, transmitted to the Central Board by Mr. F. De Grave, Secretary to the City Board. The reader will find that table inserted at page 146, and in it he will find the following entries :

	Number of Cases.	Deaths.	Deaths per Cent.
Combination of salts used at } Greville-street hospital... }	26	8	30.77
Combination of salts pro- } posed by Dr. Stevens ... }	25	22 .....	.88

In the same table, the highest rate of mortality is stated to have been 88, and the lowest 30.77. Dr. Stevens' saline treatment is therefore represented as having been the most deadly of any tried within the city, and Mr. Marsden's as the most successful !

This table will be found inserted in Mr. Marsden's work at page 55, *without note or comment*, and the inference, therefore, is, that Mr. Marsden accepted it as a statement of the truth. The reader will please to bear in mind that the table refers to the same patients as those mentioned in Mr. Marsden's published statement of October 10th, 1832, inserted at page 166. There he will find Mr. Marsden ascribing the recovery of his collapse patients to "the saline medicines, hot saline baths, and water without limitation," without a single word that would lead the reader to

suppose that he had departed one iota from Dr. Stevens' instructions as to the treatment, and far less that he claimed to have invented another and successful saline treatment. Moreover, if the reader will turn back to page 20 *et seq.* he will observe that, although a recipe for the saline mixture, with definite proportions, is there stated, yet the proportions are directed to be varied according to circumstances. So that even if we suppose, for the sake of argument, that Mr. Marsden did vary the proportions of the salts, he was in that only acting according to the instructions of Dr. Stevens. That the proportions of the saline mixture were to be varied, according to circumstances, was published by Dr. Stevens in 1832, long before the publication of Mr. De Grave's table, and therefore this tabular attempt to deprive him of the credit of the discovery is the more audacious.

This portion of our sketch is so disagreeable that it certainly would not have been inserted but for the plain fact that without adverting to so remarkable a circumstance, no history of the saline treatment could have been complete. Moreover, the groundless claim of Mr. Marsden to be considered the author of a second, and the only successful saline treatment, was renewed a very short time ago. In Mr. Ross's lectures on Cholera already referred to, Mr. De Grave's

table was reproduced as a trustworthy document, and as a matter of course Mr. Marsden's fictitious claims to the discovery of a new saline treatment that had been attended by unexampled success, again put forward ; while Dr. Stevens' treatment was in the same degree held up to obloquy as the least successful, or rather the most fatal of all. Mr. Ross's lectures were inserted at length in the " Medical Times " of 1848-9, and as they included the De Grave table, it is not surprising to find that its appearance called forth the following queries, which appeared in the same journal :

" 1. Was not the saline treatment used in Greville-street hospital *introduced* there by Dr. Stevens, with the permission, though not with the approval, of Mr. Marsden ?

" 2. Was it not *in every respect the same* as that previously used by Dr. Stevens in Coldbath-fields prison ?

" 3. Were not the ten cases, in which it was first applied, *in the state of collapse*, selected expressly because they were so ?

" 4. Were not the results, in these and other cases, so novel and startling as to lead Mr. Marsden to make a frank and manly avowal of an entire change of sentiment, and to express his determination faithfully to carry out the treatment that had answered so well in its author's hands ?

" 5. If modifications were subsequently introduced, in what did they consist, and how did they appear to affect the rate of mortality ?

(Signed)

" A. P. STEWART, M.D.

" 74, Grosvenor-street, 11th January, 1849."

These questions were not answered categorically in the "Medical Times," nor have we been able to fall in with any other notice of them by Mr. Ross than a simple intimation that he was aware that they had been put ; but, indeed, such an answer was rendered unnecessary by the fact of Dr. Turley, of Worcester, having, as we have already stated, entered into a correspondence with Mr. Ross, in which, among other things connected with the saline treatment, the fiction of a second treatment was most ably demonstrated, as appears from the following statement, inserted by Mr. Ross in the "Medical Times :"

"The impeachment of the claim of Dr. Marsden to any credit in the discovery or application of the saline treatment in cases of Cholera is made good ; firstly, by positive testimony published by Dr. Marsden himself ; and, secondly, by his rigid silence on this renewal of the discussion. That there may have been some modifications of the treatment as subsequently employed by Dr. Marsden may be true, but Dr. Stevens' claim to be considered as the originator of the saline treatment, as the first to suggest its application to cases of Cholera, is indisputable. I have the utmost pleasure in making this statement, and hope it will gratify Dr. Stevens. Honour to whom honour is due. I have not, throughout my lectures, mentioned the name of Dr. Marsden, nor given him any credit as the author of the saline treatment ; I have merely quoted the statistics of the Greville-street hospital, and contrasted them with those of other institutions ; and, if, by implication, it could be inferred that Dr. Marsden, not Dr. Stevens, deserves the credit of

the introduction of the saline treatment, it was more than I intended, and would be unjust to Dr. Stevens."

The reader may perhaps think that we have devoted more space to this matter than it was worth: all we can say is, that we have proved that from 1832 to 1849 a most remarkable misrepresentation of the saline treatment remained uncontradicted; and not only that, but was supported in as remarkable a manner by one in whom the public had an especial right to repose confidence; and also that so late as the year 1849 a public teacher of medicine, acknowledged to be of great ability, believed that misrepresentation as undoubtedly true. We may add that the effect of the misrepresentation could not be otherwise than most injurious to the saline treatment in every way. It directly asserted that Dr. Stevens' treatment was deadly far beyond every other, and, therefore, it strongly supported the attacks of the Board of Health upon the reputation of the treatment, and the veracity of those by whom it had been so successfully applied. In every respect, then, the fiction of the second, or Marsden treatment, was calculated to inflict a heavy blow, and to remain a great discouragement to the new practice, and this must be our apology for exposing its fallacy here at such length.

CHAPTER XV.

THE SALINE TREATMENT IN ST. LUKE'S HOSPITAL,
BRIDEWELL, AND ST. GILES' CHOLERA HOSPITAL.

THE new treatment was also eminently successful in St. Luke's hospital, as may be learned from the following facts. On the 29th of September, Mr. Rance, Surgeon to that establishment, sent in a report to the Central Board of Health, in which he stated that he had tried opium for a time, but had given it up on account of its tendency to produce apoplexy. He also stated strong facts in favour of the saline treatment in Cholera, accompanied with a request that his report might be published both in the "Medical Gazette" and the "Lancet." A summary of his report was published by the Central Board, and appeared in the "Medical Gazette," vol. 11, p. 83, from which we quote as follows :

"The last remedy for Cholera that I shall notice is the saline, as recommended by Dr. Stevens. Our attention was directed to its use *by the reported success* of the cases at the house of correction for the county of Middlesex. The salutary effects at the first administration were not equal to the extent we had anticipated; but since our personal

interviews with the Doctor he has kindly furnished us with more minute particulars of his plan. Dr. Cambridge (the medical gentleman appointed by our Local Board of Health to the care of the Cholera patients of this parish), with myself, have seen in a large number of cases its exhibition attended with the happiest result, not only in the rice-water evacuations, but also in the stage of collapse. From what I have witnessed, it is but justice to Dr. Stevens to acknowledge that I place more reliance upon the saline treatment than on any other that has yet been recommended."

Dr. Stevens was in communication with Mr. Rance and Dr. Cambridge when they introduced his treatment among their Cholera patients, and on their informing him that their practice had not been attended by that entire success which had been the case in Coldbath-fields, Dr. Stevens visited their hospital, and after a minute enquiry informed them that the difference arose from the saline having been employed solely in the prison, whereas in their hospital they used at the same time opium, calomel, chalk mixtures, and other improper medicines, the evil produced by which almost entirely undid the good that was effected by the saline remedies used along with them. Mr. Rance's preceding statement refers to this intimation of the cause of partial failure, and it is but justice to him and Dr. Cambridge to say, that afterwards they adopted the saline treatment in its purity, and, happily, with the fullest success. The following testimony to the value of the new

treatment was borne by Dr. Cambridge. We copy it from the "Medical Gazette" of the period :

"Finding much disappointment in pursuing this plan (the Board of Health's), and considering it as merely combating with the symptoms of the disease, instead of striking at the root of the malady, I abandoned the pursuit, and adopted that mode of treatment denominated the saline, in the manner laid down and recommended by Dr. Stevens, in his recent publication on 'The Healthy and Diseased Properties of the Blood;' and in as far as relates to Cholera, I am decidedly of opinion, from my own personal observations and experience in the treatment of this direful disease, that the saline remedies are not only the most rational, but decidedly the most successful that have yet been tried; and from what I have seen of their effects, I am induced to believe that they demand the attentive consideration and practical test of the profession, in preference to remedies which have been extensively used with so little advantage.

"I am, Sir,

"Your most obedient Servant,

"S. CAMBRIDGE, M.D.

"Cholera Hospital, St. Luke's, City-road,

"October 2nd, 1832."

The Cholera made its appearance in Bridewell on the 8th of July, 1832. Three of the male prisoners were attacked early on the morning of the 8th. They were treated with opium, brandy, and chalk mixture. George Dean, the first on the list, died on the evening of that day, at ten

minutes past seven. Francis Ryan, the second on the list, died on the 9th. D. Lee was attacked on the 9th and died on the 10th. John Martin was attacked on the 10th and died on that day. Mr. Wood, who had been attending the Cholera patients with his relative, Mr. Lawrence, was attacked on the forenoon of the 9th; he was treated with opium, brandy, and castor oil, and died at ten o'clock in the evening of that day. George Davenport was attacked on the 9th, and reported as much better on the 10th, but when Dr. Stevens, at the request of Mr. Lawrence, visited Bridewell on the afternoon of the 11th, he found that Davenport had been about five hours in a state of collapse, and considered as a hopeless case by Mr. Cox, the then medical attendant. The saline treatment was immediately used in his case, and early on the following morning (the 12th) Dr. Stevens received the following note :

“ 8, New Bridge-street, Friday morning.

“ My dear Sir,—Davenport, in Bridewell, took three powders, after which re-action took place; he then commenced your diuretic powders, and urine has been passed twice. Altogether the improvement is well marked and highly satisfactory.

“ Believe me, with many thanks for your kind assistance,

“ Yours very sincerely,

“ HARRY COX.

“ The diarrhœa patients are doing well.”

The seven persons who were attacked on the 8th and 9th were treated with opium and brandy ; the result was five deaths and only two recoveries ; but the rapid recovery of Davenport, without any consecutive fever, induced Mr. Cox to use the saline treatment for every one of the Cholera patients in Bridewell. Eleven of the prisoners had been attacked with premonitory symptoms on the 9th, but active measures were used to prevent the spreading of the poison, and partly from this cause, and partly from proper treatment, not one of these nor any of the other prisoners in Bridewell died from Cholera from the time of Davenport's recovery on the 12th of July to the end of 1832.

The writer has not the means of stating the details of the history of the new treatment in St. Giles's hospital, but evidence exists of its having proved quite as efficacious there as in other theatres of its highest success. The following extract from a letter that Dr. Stevens received from Dr. Ure, about five months after the former left London for Denmark, affords some proof of the truth of this assertion :

“ 7th Mareh, 1833.

“ A few weeks ago I met young Dr. Pinckard (one of the medical officers of the hospital), who had originally slighted your saline practice in Cholera. He told me further experience had eventually convinced him of its efficacy, and he

had better cases to adduce in its favour than any which you yourself had been able to bring forward; and my son Alexander writes me, from Paris, that M. Andral spoke highly of your work to him, as well as several other eminent Physicians. In case, therefore, of a return of this epidemic, you will be the sole practitioner at least by proxy."

In the summer and autumn of the year 1832, the saline treatment was also adopted with the best results in the convict hospital ship at Woolwich, where out of one hundred and thirty patients treated according to it, only nineteen died. Ten of these nineteen deaths occurred in hospital patients already suffering from other diseases, and whose decease had been confidently predicted before the accession of Cholera; consequently there were only nine deaths in one hundred and twenty cases of Cholera at Woolwich. At Windsor, Mr. Moss, Surgeon there, treated twenty-eight patients on the new plan without losing a single case; and at Warrington its adoption by Dr. Kendrick was attended by only two deaths in thirty cases.

The new treatment was also employed in many other localities of Great Britain during the year 1832 with the happiest results, but enough has been already stated to demonstrate that the Central Board of Health, had they merely slighted its claims, would have done so in the face of a body of evidence more than sufficient

to have satisfied all reasonable men. As it was, it has been shown that the Board of Health not only shut their eyes to the abundant evidence before them, proving the immense value of the new treatment, but went a good deal further, and, as if in order to justify their conduct towards a treatment, of whose value they could not be ignorant, they determined to root up its reputation by destroying the credibility of its advocates through one of the most audacious artifices ever practised upon the public. They determined to ignore the existence of the disease, in the greatest scene of its alleged triumphs—at least to an extent at all reconcilable with the truth of the statements that had been published of the success of the treatment by those under whom it had been applied. Hence the sham enquiry in June, and hence also a series of lesser attacks, all linked together for the common purpose of putting down the saline treatment, by destroying the reputation of its discoverer and advocates.

After having so fully demonstrated the major part of our accusation against the Board of Health, we shall content ourselves by referring the reader to the medical journals of the period for proofs of the unceasing minor attacks of the Central Board, and shall only adduce one example of the latter here by way of winding

up our indictment against the conduct of the Board.

In the "Lancet" of October 6th, 1832, appeared the following communication from the Central Board :

"UNSUCCESSFUL TRIAL OF DR. STEVENS' SALINE
POWDERS IN MALIGNANT CHOLERA.

"The Secretaries of the Boards of Health in Cork and Dublin having had the details sent to them by the Central Board in London of three cases, in various stages of Cholera, drawn up by Mr. Wakefield, Surgeon of the Coldbath-fields prison, which were treated with the saline powders recommended by Dr. Stevens, with a view to a trial being made of that plan in Ireland, answers have been returned to the Secretary of the London Board, from which the following are extracts."

These extracts consist of the following communication from the Central Board, in London, to the Boards of Health in Dublin and Cork, with the replies thereto :

"Central Board of Health,

"Council-office, Whitehall,

"September 11, 1832.

"Sir,—On the 5th of May last, by order of the Central Board of Health, I enclosed to you a copy of a letter addressed to this Board by Mr. Wakefield, Surgeon of the Coldbath-fields prison in this metropolis, *covering details of three cases*, in various stages of Cholera, treated by the saline powders recommended by Dr. Stevens, with a view to a trial being made of that plan in Ireland.

"I am now desired to request, that you will have the kindness to transmit to me, at your earliest convenience, a short outline of any information you may have obtained as to the result of the saline practice in Ireland.

"I am, &c.,

(Signed)

"W. MACLEAN."

The replies from the Boards of Dublin and Cork were brief statements of the saline treatment having utterly failed, and having been found to be the most inefficacious of all known modes of treatment; but the statements differed in a manner which we may almost term national. One of them asserted that the saline treatment was worse than useless, as it increased the nausea and vomiting; while the other asserted that if it was good for anything its goodness lay in rather allaying those symptoms!

Leaving the Irish doctors to differ as curiously as they please, if we examine this official publication, in the first place, we shall find a remarkable coincidence with the Board's great gun against the new treatment—the sham enquiry: the Irish missile is, like it, most singularly remarkable in point of time. The Central Board's letter to Cork and Dublin is dated September the 11th, and it requests that the Board may be informed of the result of a communication made so long back as May the 5th. Apparently the Board was in no hurry for

information, nor can we accuse the Irish doctors of any degree of haste in affording it. And yet the subject was sufficiently important to have warranted more anxiety on the one side, and more promptitude on the other ; but we suspect that the request for information would never have been made, had the nature of the answer not been known at head-quarters beforehand. The "Lancet" appears to have deemed the point of time in this transaction as rather suspicious, and therefore prudently omitted it altogether ; the "Medical Gazette," however, inserted the communication intact.

But whatever permitted so remarkable a lapse of time, and whatever may have been the motive for calling for information on a matter which had been so little thought of as to be allowed to lie on the shelf so long, we shall in vain seek for a solution of the enigma in the disease itself. In 1832 the Cholera struck down its victims at a blow ; it marched from one locality to another with the rapidity of lightning, and its path was marked with an appalling amount of mortality. In such circumstances it might surely have been expected that those to whom the conduct of the national means of defence from so fearful an enemy had been confided, would have been characterised by an answerable degree of energy ; but was that the case when we find the Board of Health

enquiring in September for the result of an experiment ordered to be instituted in May? We can arrive at no other conclusion than that the result of the Irish trial was not worth publishing, or it would have been published much earlier, and that it at length made its appearance not to guide the public but to defame the new treatment.

Another suspicious circumstance in the case was the sending of details of three cases by Mr. Wakefield as a guide to the Irish doctors. Why did not the Board of Health request the author of the treatment, Dr. Stevens, to afford them the requisite information? They knew that he was in London in the beginning of May; they knew also that so far from being chary in affording information respecting his new plan of treatment, he had devoted his personal care to have it carried out in a crowded prison; and possessing that knowledge, it does appear to us that if the Board of Health really desired a *bona fide* trial of the saline plan, they would have gone to the fountain head for the necessary instruction to their officers. Moreover, if the Board desired to test the new plan, where was the necessity of selecting Dublin and Cork as the localities for its trial? There were few counties in England at that period but presented some locality affected by the disease, and where it raged almost without a check, yet the Board

was content to order a trial of a treatment for the disease, which had exhibited in London, under the most unfavourable circumstances, an almost magical efficacy, to be instituted in two cities on another island, viz., Dublin and Cork. This extraordinary limitation of their enquiries, and the long period which they suffered to elapse before they enquired after the result, receives some explanation from another fact. It was known that Dr. Stevens was to leave England for the north of Europe in the beginning of October, and had it been the intention of the Board of Health to take advantage of his absence in order to promulgate an unfavourable account of the new treatment in Ireland, their report would naturally be delayed until his departure. Accordingly September was suffered to arrive before enquiry was instituted, and the result, a condemnation of the saline treatment, was not made public until the 6th of October, when the above official documents appeared in the "Lancet" and "Medical Gazette." The Cork and Dublin affair thus bears its own evidence of being another contrivance in the nature of the sham enquiry, and it is beyond comprehension how Mr. Wakefield, who is specially referred to in the Board's communication, could suffer such a publication to pass over in silence, seeing that it went to impugn his own veracity as well as to defame that

treatment, which, according to his own statement of the 25th of April, had saved about ninety-nine in the one hundred patients on whom it had been first tried, and twenty-six of whom were cases of collapse.

The plan of treatment obtained from Mr. Wakefield as a model for Ireland, by the exceedingly diligent enquirers who slumbered over their queries from May to September, may have been Dr. Stevens' or anything else; the Board of Health offered no other proof of what it was than an ostentatious representation that the saline treatment had failed in Ireland, and therefore, when we consider that Dr. Stevens was never consulted in the matter, it may fairly be doubted whether the accounts of the experiments in Cork and Dublin had any connection with Dr. Stevens' discovery; but happily we are able to shew that when fairly tried, the saline treatment proved as great a blessing to suffering humanity in Ireland as it had been found in England; witness the following extracts from a letter in the "Medical Times" for 1849, vol. 20, p. 237, by Dr. Tucker, of Sligo, referring to his trial of the new practice during six weeks of that year in which the disease prevailed in the town. Dr. Tucker states that the new treatment was the only practice adopted by him, and in regard to the result he says:

“Even before trial, the saline treatment appeared to me the most simple and scientific; but, since I have had an opportunity of witnessing its effects, I feel convinced that it is the most efficacious and successful of any practice that is yet known. In every instance where the patient was put under treatment before collapse set in, the case did well, while many patients in the last stage, who appeared to be beyond all hope, recovered under its use. Those few cases that terminated fatally were all in collapse before I had an opportunity of putting them under treatment. They were either persons of delicate and broken-down constitutions, or so poor that their friends had not the means to carry out the treatment. Small bleedings, blisters sprinkled with turpentine and applied over the heart, sinapisms to other parts, and the internal use of salines conjoined, were remarkably successful. Not a single case proved fatal from consecutive fever.”

Dr. Tucker's practice was entirely confirmatory of the accuracy of Dr. Stevens' views. On this point he says :

“In no instance did I attempt to check vomiting and diarrhœa by opiates and astringents. I observed that when these symptoms were violent, the patients did well; while those cases in which little vomiting and diarrhœa occurred, were the worst. Now, if these symptoms be, as I believe, Nature's efforts to throw off the poison, it is clear that to check that effort is to destroy all hope of the patient's recovery. The duty of the practitioner is to aid, not check the *vis medicatrix naturæ*. In accordance with this view, so far from attempting to restrain the action of the bowels, I would, in addition, if possible, excite the action of the skin

and kidneys, so that all the outlets of the body might combine in the expulsion of the poison. To check vomiting and purging is, as Dr. Stevens states, 'to lock up the poison in the body, so that fever and death is the consequence of it.' A medical student who was employed in 1832, at Paris, to treat Cholera, wrote thus:—"I first cured them of the bowel complaint, and then they got fever. I cured them of the fever, but still they died, and no thanks to me."

From his extensive practice in Cholera, Dr. Tucker's opinions deserve the highest attention; they were stated in the communication to the "Medical Times" as follows:

"Our object in Cholera should be to establish reaction by oxygen: our only hope of effecting this in the cold or collapse stage is through the stomach, by means of the chlorate of potash and other salts. I am unable to understand how benefit can be expected in Cholera from mercurial treatment, when I consider the nature of the disease—a toxæmic state or poison of the blood—and that the therapeutic action of mercury in inflammatory diseases is to kill a portion of the blood, to break down new and morbid structures, to diminish the function of sanguification, and to reduce animal heat to its normal standard.

"I am, therefore, from the foregoing reasons, convinced that the saline treatment of Dr. Stevens is the proper practice to be pursued, as it appears to be the only one that has anything like rational principle or real success in practice to support it. The Government ought to enquire into the real merits of the saline treatment and appoint Commissioners to report upon the various modes of practice in Cholera. In

1845 Commissioners were appointed in Ireland to report upon the nature of the potatoe rot, and surely the Cholera may well call for a similar investigation."

But it was not only in 1849 that the saline treatment was practised successfully in Ireland: notwithstanding its alleged failure under the ordeal of the Board of Health's experiments in 1832, in the summer of that year it was extensively adopted in Dublin with the greatest success. In the "Medical Gazette" of the year 1832, vol. 10, page 269, occurs the following passage, written by the Editor, Dr. M'Leod :

"We have lately seen two letters from Dublin, in which it is stated that the saline treatment of Cholera, as described in this journal, has been extensively adopted, particularly in private families. In consequence of the statements regarding the Coldbath prison being copied from our pages into some of the daily papers, many persons had provided themselves with bottles, filled with the salts, in due proportion, so as to be ready for immediate use. The mortality has recently very much diminished, and we observe in one of the latest reports, fifty-one recoveries and only four deaths."

CHAPTER XVI.

THE SALINE TREATMENT ABROAD.

THE unworthy condemnation of the saline treatment by the Board of Health, doubtless operated to prevent in a great degree its adoption, or even trial, by practitioners on the Continent of Europe ; still it made its way in some quarters. In the month of October, 1832, Dr. Stevens journeyed to Copenhagen. At that time Denmark was quite free from the disease, although many places on its borders were infected, and the disease exhibited in the stricken localities its usual fatal virulence. Dr. Stevens, at the request of the late King of Denmark, the then Crown Prince, published a summary of his mode of treatment in Danish, which he caused to be widely disseminated, and by this means a knowledge of the saline treatment was obtained by the medical profession of Scandinavia.

The new practice was put to the test of experiment in both Norway and Sweden, and when not mixed with other so-called remedies, it gave most successful results. The Cholera made its appearance at Drammen, in Norway, in 1832 ; but

it did not appear in any of the other towns of either Norway or Sweden until the summer of the following year. In the beginning of the pestilence many plans of treatment were tried; and at last so much benefit was derived from the saline treatment in Norway, that, in 1834, Dr. Stevens received, through the medium of the Norwegian Consul in Denmark, an official communication from the Regent of Norway, accompanied with the official report of the Central Board of Health to the Norwegian Government, in which it was stated, that although they had not found in Norway the saline treatment so successful in Cholera as he had found it in England, still they felt it their duty to state that it had produced many surprising recoveries. They admitted, also, that of all the plans they had used, they had found the saline practice, as recommended by Dr. Stevens, to have been one of the best plans of treating Cholera. Such was the account that the Central Board of Norway gave of the new plan: but it is known from other sources that some at least of the Norwegian practitioners had recourse to the saline treatment only in the most desperate cases; and even in these, only after their own plans had completely failed.* We may add, also, that the

* See Dr. Egeberg's instance, page 148.

accounts of the results of the saline treatment sent by the Norwegian to the Swedish Government were so favourable, that in 1833 Dr. Stevens received a letter from Count Wetterstedt, the then Secretary of the King of Sweden, expressing, in the names of the King and the Crown Prince, their thanks for his having circulated copies of his pamphlet on Cholera in Norway.

The medical members of the Central Board of Health in Norway considered the saline plan as only one of the best plans for treating Cholera; but the Board of Health of Upsala, in Sweden, gave a very different decision on this subject; for after mature experience they published directions for the treatment of Cholera patients in the manner of the premonitory publications of the English Boards of Health, in which they directed recourse to be had to the saline treatment in every severe case, as Mr. Wakefield says, as to "a sheet-anchor." The following is an extract from those directions:

"Melt three good table-spoonfuls of common salt in a quart of warm water, and then the half of this is to be taken immediately. If this does not produce sufficient vomiting in fifteen minutes, then the other half must be taken immediately; and during this period plenty of lukewarm water, or tea made of camomile, must be freely used.

"After the stomach has been sufficiently emptied, and if an inclination to more useless vomiting continues, then, as soon

as possible, a warm large mustard or horseradish poultice ought to be applied over the region of the stomach. This should be kept there until there arises a strong perspiration, and then a moderate tea-spoonful of the carbonate of soda in a good table-spoonful of equal parts vinegar and water is to be given in the state of effervescence every twenty minutes.

“After three or four doses of the above effervescing medicine, and whether the tendency to vomit be diminished or not, there must then be given regularly each half-hour a Stevens’ saline powder, in two or three table-spoonfuls of bouillon or oatmeal gruel. One of these powders is to be given every half-hour, until the Cholera symptoms have wholly and entirely disappeared; but even then the saline powders are to be gradually discontinued with more and more increased intervals. If the cramps are very severe, a warm—and particularly a warm saline bath—is of great benefit. To fifty cans of water it will be necessary to add seven to eight marks of salt; and if a bath cannot be had, then the painful parts must be rubbed unceasingly, and by several persons at once, with warm woollen cloths.”

One would have supposed that the fact of a learned body such as the Board of Health of Upsala (the scene of the scientific labours of the great Linnæus) adopting the saline treatment, would have produced some effect on the English Board of Health; but that does not appear to have been the case, and the only bearing which the Upsala acceptance of the new practice has upon the English Board of Health is to aggravate the misconduct of the latter, as in so far proving that they were determined *coute qui coute* not to

recognise any merit in a treatment which they had condemned, no matter that its condemnation was entirely without foundation.

It may not be out of place here to present from foreign scientific research the following confirmation of Dr. Stevens' theory of Cholera, particularly with reference to the condition of the ejections in Cholera patients. We are quoting now from Dr. Gutterbock's analysis of Cholera ejections recorded in "Poggendorff Annalen," band 79, page 323 :

"1. A most remarkable circumstance is the large proportion of water, amounting, on an average, to 99·119 ; while, according to Berzelius, normal stools contain 75·3. The specific gravity, too, is remarkably low, varying from 1,006 to 1,008 ; the urine itself, in but few diseases, manifesting so low a one. 2. The solid constituents amount on an average to but 1·581. 3. Among these, the inorganic *salts* constitute by far the largest portion—upon an average 4·5ths, the organic matter being only 1·5th :—a proportion that is the reverse of the normal, in which the organic parts form 19·20ths according to Berzelius, and 9·10ths according to Rose. 4. Among these salts the most remarkable is the *chloride of sodium*, constituting, upon an average, nearly $\frac{1}{2}$, and in some cases 2·3rds of the whole. The Cholera evacuations contain nearly $\frac{1}{4}$ per cent. on an average, while, according to Berzelius, the normal proportion is but 0·28th ; and according to the latest analysis of solid excrement, by Rose and Fleitman, this proportion is even unusually large, as in 100 parts of the entire salts only 1·58th was chloride of sodium. *Thus the Cholera stools contain a hundred times as much salt as the normal ;* and, indeed, so

considerable is the quantity, that, after the evaporation of the fluid, the unassisted eye recognises the characteristic crystals. 5. Next to this the *carbonate of soda* is most abundant; and besides these, are some phosphate of magnesia and lime, and a trace of the sulphate. The absence of *potass* in the stools is remarkable, forming as it does a chief saline constituent in the normal solid stools."

Thus the experience of Continental science alike confirms Dr. Stevens' views of the nature of Cholera, and also the value of his saline treatment as a remedy for the disease.

CHAPTER XVII.

RECAPITULATION: CONCLUSION.

THE reader who has perused these pages thus far, can hardly have failed to become impressed with the belief that a clear case has been made out in favour of the value of the saline treatment. It has been shewn that during the two visitations of the Cholera in Coldbath-fields, in the year 1832, there were in that prison upwards of five hundred cases of the disease, in which all the patients had suffered under its second stage, and a great number had sunk into the collapse state. Of these, about four hundred and seventy were

treated on the saline plan, with a result of four hundred and sixty-two recoveries and four deaths. Surely it would be difficult to subject any mode of treatment to a more severe trial, and as certainly would it be unreasonable to expect a greater measure of success. Nor was the trial complete and searching merely on account of the number of the patients: the cases presented the gravest symptoms of the disease, and in no less than two hundred and one the collapsed stage had supervened.

The following summary of the Coldbath-fields cases may impress the facts more clearly upon the memory :

Total number of cases during first visitation, 5th of April to May the 11th	165
Total number of cases during second visitation, June the 3rd to December the 27th	339
<hr/>	
Total of cases	504
	Deaths. Recoveries.
First visitation	7 158
Second visitation	34 304
<hr/>	
Total	41 462

The entire mortality arising from Cholera in Coldbath-fields prison is thus shewn to have been eight per cent. ; but this ratio is calculated upon the whole number of deaths from all the cases

under every kind of treatment adopted, while it has been shewn at pages 40 and 55, that the saline treatment is only responsible for four deaths. The following table exhibits the numbers of patients treated on the saline plan, with the recoveries and deaths in both of the visitations :

	Patients treated.		Recoveries.		Died.
First visitation	159	.....	158	.....	1
Second visitation	307	.....	304	.....	3
	<hr/>		<hr/>		<hr/>
	466	.....	462	.....	4

It is thus shown that the entire deaths in four hundred and sixty-six cases treated on the saline plan amounted to only four, or less than one per cent.; while in thirty-seven cases, wherein the treatment adopted was that recommended by the Board of Health, or wherein the saline treatment was not used, there was not a single recovery.

It must also be borne in mind that cases of mere premonitory diarrhœa are not taken into account in the preceding, but that in all, the patients had suffered from the second stage, or had sunk into its last phase, that of collapse. It is highly interesting also to remark that even in that dismal stage of the disease, when all the functions were suspended, and life hung by the slightest thread, the new practice exhibited the most sanative effects. The saline treatment was

practised in one hundred and sixty-four collapse cases, and even ascribing to collapse the whole of the mortality, it follows that the recoveries were one hundred and sixty, and that the deaths amounted to only two and a half per cent. Thus the disease in this prison in its several stages, when treated by Dr. Stevens' new practice, was attended by a mortality in the ratio of less than one per cent., and in its collapse stage, under that treatment the mortality only reached two and a half per cent.

So much for the experience of Coldbath-fields, which might well be trusted of itself to recommend the saline treatment to the general adoption of the medical world. But that experience does not stand alone: on the contrary, it has been most abundantly confirmed, as we have shown, in other prisons and hospitals in the metropolis, and in private practice in all parts of the British islands, and many other countries. It will also be remarked, and the circumstance deserves the highest degree of attention, that this corroborative testimony is more immediately connected with the collapse stage of the disease. If the reader refer to the experience of Greville-street hospital, he will find that the saline treatment was first applied there in a collapse case of the worst kind, and he will also find Dr. Marsden detailing the results of his practice, extending over a most ample amount

of collapse cases, with the highly gratifying result of seventy-four recoveries and seven deaths in eighty-one cases. Mr. Marsden's practice of Dr. Stevens' new plan of treatment was thus attended by about eight per cent. of death; certainly a considerable excess over that of Coldbath-fields prison, but probably not more than might fairly be looked for when we consider that many of his patients would not be brought to the hospital until their relatives had lost all hope of their being saved by treatment at home, and consequently the strength of the disease had in some cases got beyond the power of art. The conveyance of the patients from their homes to the hospital, with its necessary exposure to aggravation of the symptoms, was a circumstance in favour of the prison over the hospital, and thus the seeming discrepancy appearing between them, in the ratio of mortality arising from Cholera in the collapse stage, under the saline treatment, may be accounted for.

It seems to have been chiefly in cases of collapse that the saline treatment was first applied in the various hospitals of the metropolis, and even in private practice, and it was the same abroad. At Christiania, in Norway, the English treatment, as Dr. Stevens' new plan was termed, was only applied in the last stage of the disease, and even then it was the means of saving

many lives, although it has been seen that one practitioner's comparative want of success has been adduced to bring out a most fabulous ratio of mortality against the new treatment. We are referring now to Mr. Ross's explanation of how he was induced at one time to believe that Dr. Stevens' treatment, in a given number of cases, had been attended by the murderous mortality of 88 per cent.; and we may remark, in passing, that Mr. Ross makes no difficulty of regarding Dr. Egeberg's practice in Christiania as identical with Dr. Stevens', while, misled by the fabulous De Grave table, he ascribes the merit of a saline treatment of a most efficient kind to Mr. Marsden, although, on his own shewing, the latter's salines differed merely from those of his acknowledged instructor, Dr. Stevens, in a slight degree as to the proportions of the salts. We may add that had Mr. Ross perused Mr. Marsden's own account of the wonders wrought by the saline treatment in Greville-street hospital, *written before the appearance of the De Grave table*, he would not have found in it the slightest indication that any variation or modification of Dr. Stevens' practice of any kind whatsoever had been ventured upon. The discreditable fable of the second saline treatment has been already abundantly dealt with, and requires no further notice.

Notwithstanding such facts, it is, however, beyond denial that the saline treatment has not been even generally tested; indeed its trial has been the exception, while the rule has been a contemptuous rejection. A more melancholy result has, perhaps, not attended anything of a public nature in our day; and this may readily be admitted, if we regard merely the deplorable amount of mortality caused by Cholera within the British dominions alone. In the metropolis, in the year 1849, the deaths from Cholera were not less than fifteen thousand: that much of that loss of life might have been averted will appear plain enough, if we consider that the mortality arising from the disease under the general modes of treatment is above 60 per cent., while we have shewn that under the saline treatment, in 1832, it was not more than one per cent. in a crowded prison, with a field of action for the pestilence of seven thousand prisoners and upwards of five hundred patients. It is probable that the mortality from Cholera in the British Isles and Jamaica alone, during the years 1849-50-51, amounted to one hundred thousand: it is also probable that by far the greater portion of the victims might have been saved by proper treatment.

Surely, then, it must be of no little importance to be able to shew what has obstructed the

adoption of the means by which so great a waste of human life might have been averted; and after the facts we have stated, we can have no hesitation in declaring that we have proved that the Board of Health of 1832 is primarily responsible for so fatal a result. By its sham enquiry and other publications in the medical journals of the day, the Board generated a prejudice against the saline treatment, which rendered it worthless in the eyes of the great body of medical practitioners, especially of those in any way connected with the Government, and that prejudice has continued down to the present time. It does not signify that the decision of the Board of Health, had it been examined, would have been found to rest upon premises not merely insufficient, but even absurd. All people are in the habit of deferring to the duly constituted authorities, and the medical profession have not been more to blame in this matter than in not being an exception to a general rule. It remains to be said, however, that, in all probability, there never was a more flagrant instance of unreasoning acquiescence in any proceeding of authority than was unhappily evinced in this instance. Had the report of Sir David Barry and the order of the Privy Council been perused with even an ordinary degree of attention, it must have been apparent

that the report by no means followed out the instructions of the order, inasmuch as the latter directed the inspectors to examine into the particulars of the disease in the prison of Coldbath-fields, and the former contented itself with a meagre detail respecting the occupancy of a portion of the infirmary wards. The examination was confined to a few minutes—a fact sufficiently indicative of the farcicalness of the whole proceeding ; and its mendacious attempt at ignoring almost the very existence of the disease in the prison was audaciously sought to be modified by the most extraordinary statement we venture to say on record in any circumstances, viz., that nothing in the report in respect to the patients had any reference to anything anterior or posterior to the moment when the inspectors saw them. The insertion of so extraordinary a caveat in their report plainly hazarded the rejection of the whole as an insult to the common sense of the Privy Council, and indeed of all by whom it might be read, and it must have been unwillingly conceded by him whose name it bears, doubtless under the compulsion of the scruples of one of his colleagues, who was a frequent visitor to the prison, and had seen numbers of patients in all stages of the disease in its infirmary a day or two before, and therefore was in circumstances to prevent the possibility of

his believing that there could be only two Cholera patients in the prison on the day of the inspection—except indeed he had reposed the most absolute faith in the extraordinary opinion that has since been given in reference to the phases of the disease, viz., that so rapid are the changes in the condition of the patients, that he who is at the brink of death in the morning may be a hale man by mid-day. The concoctors of the extraordinary caveat-postscript to the report of the sham enquiry may have trusted to the prevalence of such an opinion, as the means of obtaining toleration for so intolerable an outrage upon common sense.

A very ordinary degree of attention in the readers of the report would have shewn its intrinsic worthlessness as any guide to the Government or to the public on the subject of the saline treatment, or “particulars of the disease,” as the order of the Privy Council has it. But the bad spirit in which it was drawn up was so clearly evinced at the very commencement, that one cannot help feeling surprised alike at the circumstance of its escaping general reprehension, and the daring malevolence that ventured to exhibit such a feeling in a document to be presented to the Government of the nation, and, above all, that prompted and risked its publication. Its author might have relied upon the supineness

of the Government department : a report from the Board of Health to the Privy Council on such a subject was, in point of fact, merely a report from the Board to itself ; but its publication was another matter, requiring more nerve than falls to the ordinary lot, although the result unhappily goes far to prove that its author had as correctly estimated the acumen of the reading public as he had thought lightly of the supervision of the Privy Council. The reader who bears in mind thus far the contents of the report will, we think, agree with us, that it was as disrespectful and uncandid in Sir D. Barry to term the saline treatment merely "the use of culinary salt," as it was discourteous and insolently vulgar to apply the contemptuous expression, "a young man of colour," to Mr. Crook, the able and experienced assistant of Dr. Stevens in Coldbath-fields prison.

The secondary causes of the comparative want of acceptance of the saline treatment have been the other publications of the Board of Health, directed against the reputation of the treatment, such as that respecting the alleged Irish experiments, which were so curiously instituted and so inexplicably shelved until Dr. Stevens was on the eve of leaving the country. In this category, too, we may include certain returns from the prison, bearing the official stamp of having emanated from Mr. Wakefield, Surgeon

to the prison, but which are so much at variance with that gentleman's published accounts and reports to the Magistrates, as well as the entries in his journal, as to be an unpleasant mystery, admitting of no satisfactory solution that we can see. We cannot for a moment hesitate in believing that the reader's confidence and belief must be accorded to Mr. Wakefield's published statement of April 25th, and his report to the Visiting Magistrates and minute of June 28th (*vide* pages 29 and 108), corroborated as they are by the mass of other testimony, adduced in the body of this statement.

It has been shewn that during the first irruption, from the 5th of April to the 11th of May, Mr. Wakefield reported only twenty-four cases with seven deaths to the Privy Council, whereas there were one hundred and sixty-five cases of true Cholera, thirty-nine of which were cases of collapse, with only one death in the first hundred and fifty-nine cases that had been treated on the new plan. During the second irruption, Mr. Wakefield, on the 28th of June, reported to the Visiting Justices seventy-five cases of Cholera, and yet on the afternoon of that day he sent an official return to the Privy Council, which must have led any one who read it to believe that there were only twenty-nine patients in the prison, and of these twenty-four were suffering under pre-

monitory symptoms only—"all of whom," he adds, "were, he was happy to say, in a state of convalescence."

It has been shewn, also, that on the 28th of July, Mr. Wakefield sent an official return to the Privy Council, certifying that from the 3rd of June to that date, there had been only fifty-nine cases of "decided Cholera" in the prison, and seventeen deaths; he might have added, but did not, that only two of these seventeen patients had been lost under the new plan; whereas his own journal proves that from the 3rd of June to the 28th of July, there had been no less than one hundred and seventy-six cases of Cholera in the prison, eighty-nine of which had been cases of collapse.

As may be seen at page 129, it is highly probable that it was Mr. Wakefield's mysterious return of only fifty-nine cases of "decided Cholera," from the 3rd of June to the 28th of July (instead of one hundred and seventy-six), in conjunction with the sham enquiry, that prevented a fair investigation into the facts connected with the disease in the prison, and which, it is not saying too much, by demonstrating the wonderful success of the saline treatment, might have conduced to its general adoption, and so have prevented the sacrifice of the thousands upon thousands of human lives that have since been lost from the unchecked progress of the Cholera.

Moreover, the saline treatment has been obstructed in its progress to general adoption by the silence of Mr. Wakefield and Mr. Marsden, which has been of a very marked character since the year 1832 to the present time. In 1832, Mr. Wakefield permitted the publication of the documents of the Board of Health to pass without the slightest protest, although they were directly at variance with his own published statements of April 25th, and with his reports to the Magistrates on the 28th of June. Such conduct in the practitioner, generally known to have been more concerned in the introduction of the saline treatment than any other, could not fail to perplex even the thinking few, while it was calculated to act more absolutely to the disadvantage of the new treatment with the world at large, and the evil effect of so remarkable a silence was not likely to be rendered less by the fact that Mr. Wakefield had several times abandoned the saline treatment, even although it be perfectly true that he had always returned to it, in his own words, as to "a sheet-anchor."

Mr. Marsden, in 1832, silently permitted the publication of the fable of his having been the author of a second saline treatment that had been attended by only eight per cent. of loss, while the same fable stated that Dr. Stevens' treatment had been attended by a loss of no less than

eighty-eight per cent. ; and in 1834 the same Mr. Marsden actually adopted that fable by printing it at length in the De Grave table in his book on Cholera, *without note or comment*. And finally, although both Mr. Wakefield and Mr. Marsden had seen so many Cholera patients, in a state of collapse, saved by the saline treatment, yet they permitted the Board of Health to declare to the world, in January, 1851, that the medical experience of Europe enabled them to declare that for the collapse stage of Cholera there was no cure. Those gentlemen may excuse themselves on the ground of dislike to notoriety, even in the shape of controversy on professional subjects, and that excuse may avail, as the world is not very exacting. All we shall say is, that there are some higher considerations than personal convenience or predilections involved in the matter, and where these are disregarded by persons so placed as those gentlemen were, the public weal is but too likely to suffer, as it has undoubtedly done from the successful attempt to crush the reputation of a new practice that reduced the mortality from Cholera to about five per cent. in the many places, and many hundreds of cases, in which it had been fairly tried, in 1832, without admixture with other means.

A P P E N D I X .

SOME additional cases from Coldbath-fields have been added here by way of appendix, in the hope of rendering this memoir more useful to the profession in a practical point of view. The cases are derived partly from the journal of Mr. Wakefield, the Surgeon to Coldbath-fields prison, and partly from the account (before referred to) of cases kept during the visitation of Cholera to that prison by one of its inmates, named Lonegan.

Nos. 1 and 2 were those that occurred first in the prison, and which were treated on the Board of Health's plan. Nos. 3, 4, and 5 were treated by Mr. Wakefield on the saline plan before Dr. Stevens undertook to superintend the application of the saline treatment to the patients in the prison.

Cases No. 6, 7, and 8, occurred during the second visitation, and were under treatment on the 27th of June, when Dr. Barry declared that there was not a case of Cholera in the prison, and also on the 28th of June, when he declared that he only saw two persons with the appearance of

Cholera. The reader will have gathered from Mr. Rotch's account of the sham enquiry (*vide* page 91), that Dr. Barry was by no means inclined to admit that there were even two cases of Cholera in the prison. It is also evident that it was the circumstance of one of his associates on the enquiry being unable to withstand the evidence furnished by a momentary glance at the symptoms of one of the poor sufferers, that forced Dr. Barry to that admission. From the histories of these three cases the reader will be able to judge of the good faith of the enquiry which has been characterised by us as a sham. The patients in those cases were in the prison on the 25th of June, when, according to Dr. Barry's use of Mr. Wakefield's official return of the 28th, there could not have been one case of Cholera in the prison previous to the 26th. The same patients were also in the infirmary on the 27th, when Dr. Barry obtained a certificate from Dr. O'Shaughnessy to prove that there was not one case of Cholera in the prison on that day. These patients were also in the infirmary on the 28th, when, according to Mr. Wakefield's report to the Privy Council, all the patients then in the prison were in a state of convalescence, and when, according to the sham enquiry, there were only two persons with the appearance of Cholera in the infirmary.

Those three days of June, the 26th, 27th, and 28th, deserve special notice, and perhaps even more than they have received in the body of the memoir. Mr. Wakefield was ordered by the Board of Health to send in a report with the names of all the persons attacked with Cholera within the prison on these three days. Can the reader imagine why the Surgeon was ordered to report only the patients of those three days? The Cholera had reappeared in the prison so early as the 3rd of June, and, it is clear from the Surgeon's statement (*vide* page 107), with increased severity. Why, then, did the Board of Health restrict their enquiry to the 26th, 27th, and 28th days of that month? It is not easy to answer this question. It may be supposed that the return was restricted to those days, because of Dr. Barry's visits to the prison on the 27th and 28th, and of the extraordinary contradiction given by his declaration—that there was not a single case of Cholera in the prison on the 27th, and only two on the 28th—to the statements of Dr. Stevens, Mr. Wakefield, and of the Governor of the prison. A corroboration of this declaration by the Surgeon of the prison would have conferred a look of reality and truth upon Sir D. Barry's report. How, then, does the fact stand? The result directly contradicts Sir D. Barry, and makes one wonder that he published Mr. Wakefield's return, even

such as it is. That return will be found at page 106; and so far from bearing out Sir David Barry's statement, it exposes its untruth in the clearest manner. The return gives the names of thirty-one patients, who are described as labouring under confirmed Cholera or premonitory symptoms. The reader must be puzzled to account for the publication of such a document, contradicting, as it does so directly, the audacious statement that on the 27th of June there was not one case of Cholera in the prison, and only two on the 28th.

But even the return of Mr. Wakefield to the inexplicable order of the Board of Health is itself a mystery, as has been shewn at page 107. We may add here that this official document, which had been sent from the Board of Health, contained columns for the names of the patients, for the age, for the date of attack, for premonitory symptoms, and for collapse; *but there is no column for Cholera*, meaning by that, cases in which the patient was suffering from the second stage of the disease, and of which the symptoms (as described at page 4) are diarrhœa, vomiting, cramps, spasms, coldness, and sinking of the pulse. And, therefore, all the cases of real Cholera, *not yet in a state of collapse*, were put into the column of patients with mere premonitory symptoms. It is needless to say that such a

classification afforded a most inaccurate view of the particulars of the disease in the prison, and it is difficult to conjecture why it should have been employed unless to mislead the Privy Council and the public by misrepresenting the real condition of the matter. The return now under consideration even goes further than that, for in it the five collapse cases admitted to the infirmary on the 26th and 27th of June are placed in the column of premonitory symptoms with the term "confirmed Cholera" opposite to them, and although there is a column for "collapse" cases, yet not one case is entered therein! Nor does it take the slightest notice of the eighty-two patients with Cholera, nor of the thirty-seven cases, all of which had been collapsed, which were under treatment in the prison on the 28th of June.

This official return to the Privy Council of the 28th of June is not only thus strangely at variance with the facts of the case, as recorded in the Surgeon's journal of the prison, in regard to the number of cases and the stages of the disease under which the patients had suffered, but it positively declares that the whole of the patients then in the prison were at that moment in different stages of convalescence, although, as we have seen, Edward Kerry, one of the patients was then actually dying, and died that evening at

a quarter before nine o'clock. Moreover, two of the patients then in the prison, included in the return, died on the following day, and three more of the same "convalescents" died some time after of other diseases. On the 28th, Edward Kerry, Richard Card, and others were so dangerously ill, that the Visiting Magistrates issued the circular inserted at page 109, warning police officers to refrain from coming to the prison for fear of spreading the infection. Mr. Wakefield had also on the same day reported to the Visiting Magistrates that there were seventy-five Cholera patients under treatment. These facts are proved by the records of the prison, as cited in the body of this memoir, and certainly contrast strangely with Mr. Wakefield's inexplicable declaration in the return, that he was happy to state that all the Cholera patients then in the prison were in a state of convalescence.

Having stated the facts, it is for those who are curious after motives to assign such as appear to them deducible, but it appears to us that the only tendency of such publications as the return to the order on Mr. Wakefield for the names of all patients attacked with Cholera on the 26th, 27th, and 28th June, could be to produce an impression that there had been no Cholera in the prison previously. Nor, looking at the facile manner in which the report of the sham enquiry was received,

is this a violent presumption, although the antecedents were certainly not of a character easily set aside. From the 3rd of June to the 25th of that month there had been eighty-two cases of Cholera in the prison; fifty-nine of these were collapse cases, and seventeen of the patients died, under the circumstances previously narrated in this statement, for which loss of life, however, the saline treatment, as has been shewn, is not responsible. Yet the Surgeon of the prison where so much of this fell disease had been crowded into so brief a space, was induced to send into the Government department charged with the care of the public safety, a return as little informative as if all reference to the real state of things had been especially excluded!

It only remains to be stated here, in reference to the following cases, that, by an error of the transcriber from the books of the prison, the patient, Joseph Allen, is entered in the list of patients as having died July 12th, whereas, after a surprising series of vicissitudes, he finally recovered and was dismissed cured. In the same list also, the letter D. (denoting that the patient died) is appended to several patients described as having been treated on the saline plan; but this is inaccurate, although copied from the prison journal; and it will be recollected that Mr. Wakefield has asserted that every one of the patients

were treated on the new plan from the 11th of April to the end of 1832. The case of Mary Driscoll, page 72, is an example. She, as stated by Mr. Wakefield (*vide* page 59), was first put under the saline plan, but died after an experiment of dashing cold water over her naked body.

CASE I.

"April 5th.—John Summers, age 70, was admitted into the infirmary at half-past six o'clock on Thursday morning. The account the patient gave was as follows. He had been attacked the preceding night with violent pain in the stomach, cramps in the hands and feet, with coldness all over the body. At the time of his admission he laboured under all the above symptoms, and the case was treated in the following manner. A large mustard plaster was instantly applied to the region of the stomach, bottles of hot water to the feet, and warm flannels to the abdomen and upper extremities. The patient, however, was not at all relieved, and at half-past seven a.m. he was ordered to take twenty drops of tincture of opium in a little warm brandy and water; he had at this time passed several thin watery stools of a whitish appearance, and resembling rice water. The patient gradually became worse and complained considerably of cramp in his bowels. Ten drops of tincture of opium, in about half an ounce of brandy, was occasionally administered, and friction with warm flannels constantly kept up. The patient became excessively restless, complained of thirst, and the symptoms becoming more and more aggravated, he expired on Friday morning, at a quarter before ten. This patient had passed no urine whatever during his illness."

CASE II.

“April 6th.—William Jeffery, age 30, was admitted this day into the infirmary at twelve o'clock at noon, and said he had been complaining all the morning of pain in the stomach and griping pains in the bowels, with cramps in his legs and feet, and at the time he entered the infirmary these symptoms had somewhat increased. He was at first ordered some hot brandy and water, and the application of bottles with hot water to the feet, with warm flannels to the arms, hands, and abdomen. At half-past twelve o'clock p.m. he was ordered a draught composed of ——— ; he was then placed in a hot-air bath of the temperature of 82, in which he was kept thirty-two hours, viz., from two p.m. until ten p.m. the following day ; he complained of nausea at the stomach, but did not vomit at all ; he passed several very thin watery evacuations, having the appearance of rice water ; he was ordered small doses of tincture of opium in brandy occasionally, and a mustard plaster to the stomach ; his extremities now became cold and of a livid appearance ; he gradually grew worse, and expired on Monday, the 9th, at a quarter-past three a.m.

“This man was not put under the saline treatment ; during the whole of his illness he had not passed one drop of urine.”

CASE III.

“April 6th.—Anthony Welch, age 40, was admitted into the infirmary this day at twelve o'clock at noon ; he had been attacked the preceding night with violent cramps in the legs, pain in the abdomen, vomiting and purging. At the time he was admitted the cramps in his legs had become very distressing ; there was also great tenderness on pressure of the abdomen. Ordered warm applications to the feet and

abdomen, a mustard plaster to the stomach, and warm brandy and water to be taken occasionally.

"7th.—Symptoms still severe; ordered a continuance of the remedies, and not having an evacuation to-day, a dose of castor oil was administered.

"8th.—The cramps in his legs and pain in the stomach and bowels still continue; ordered a saline powder every hour, and an injection of [muriate of] soda and brown sugar, with warm water to be thrown up.

"9th.—The patient is something better; is ordered to continue the saline powders; the cramps in the legs have entirely left him.

"10th.—Continues to improve; the saline powders to be continued; no pain in the bowels, but complains of pain in the stomach; ordered a mustard poultice to the part.

"11th and 12th.—Is considerably better; the saline powders continued.—This patient rapidly improved, and was discharged cured on the 14th."

CASE IV.

"April 7th.—Samuel Corderoy, age 18, was admitted into the infirmary at six p.m.; had diarrhœa three or four days previous to his admission. He was at this time complaining of violent pain in the abdomen, sickness at the stomach, severe cramps in the legs and arms, with coldness. He had warm applications to his feet, warm brandy and water occasionally administered, and a saline powder every hour.

"8th.—Is still suffering with pain in the abdomen and nausea; passes the rice water evacuations; cramps and coldness of the extremities continue; pulse almost imperceptible; excessive weakness. Apply a large mustard poultice to the stomach and abdomen; give him a seidlitz powder; continue the warm applications; let him have the saline powder every hour, and when thirsty give him soda water.

"9th.—Is better to-day; his skin is warm; he has no pain or uneasiness in the stomach or abdomen. Let him continue the saline powders.

"10th.—The patient is better to-day, but complains of being a little sick at stomach. Let him take a seidlitz powder immediately and continue the saline powders.

"11th.—Patient is much improved in every respect. Let him have salup or sago, or, should he prefer it, beef tea.

"12th.—Patient from this date rapidly recovered, and was sent from the infirmary quite well" [on the 24th.]

CASE V.

"April 7th.—George Pickering, age 21, was admitted at seven o'clock this morning. He complains of violent pain in stomach and bowels; cramps in arms and legs; nausea; frequent evacuations of a whitish colour and fluid. Ordered warm applications to the feet, and friction with warm flannels; to take a saline powder every hour, and also a little hot brandy and water when thirsty.

"8th.—Patient vomits considerably; his extremities are cold; passes the rice water evacuations; has violent cramps; great pain in stomach and abdomen; prostration. Ordered a seidlitz powder and a large mustard plaster to the stomach and abdomen; friction with hot flannels to be continued; the saline powder to be administered regularly every hour, and soda water to be taken when thirsty.

"9th.—Is much relieved; feels warm and comfortable. Give him another seidlitz powder, and continue the warm applications and soda water.

"10th.—Is quite better; his evacuations much improved. Continue the saline powders, &c.—This man continued to do well, and was in a very few days perfectly restored to health, and discharged from the infirmary" [on the 12th.]

CASE VI.

"June 19th, 1832.—John Murphy, age 42, was admitted into the infirmary this day at seven a.m. (having yesterday been discharged from the first infirmary recovered from dropsy.) On his admission this morning he had griping pains in the intestines, with purging; an icy coldness of the extremities; nausea at stomach, with vomiting; eyes sunk; countenance inanimate; cramps very distressing; voice scarcely audible; and pulsation not perceptible. The saline treatment was immediately commenced, as also the mustard applications, injections, and frictions. The saline powders were administered every hour, and soda water at intervals. He continued in a state of collapse for several hours, but towards the evening rallied a little; give him a seidlitz powder.

"20th.—Very bad; incessant vomiting and purging.

"21st.—Still in a dangerous state; the evacuations frequent, and of a decided rice-water character, and very offensive; lips blue; stomach irritable; tongue furred.

"22nd.—A slight favourable change; stomach more composed: pulse feeble.

"23rd.—Again worse.

"24th.—Declining gradually.

"25th.—A shade better.

"26th.—Another relapse; excessive debility.

"28th.—Completely collapsed; * motions passed involun-

* This was the day of Dr. Barry's official inspection; according to his statement, there were only two persons with the appearance of Cholera on the 28th, and not one on the 27th. The above patient is inserted in Loneyan's private journal as having died from debility on the 10th of July, twenty-one days after the attack of Cholera.

tarily ; total suppression of urine ; extremities and tongue cold ; voice lost. Repeated the mustard applications, and persevered in the saline remedies.

“29th.—An improvement manifest ; bowels less irritable ; warmth returning ; and pulsation stronger ; gave him a little arrowroot, which he retained.

“30th.—Says he feels no pain, but great exhaustion ; discontinue the injection.

“July 1st.—Gradually declining , a little tea offered him, which he drank.

“2nd to the 7th.—Fluctuation from better to worse, but it is not probable that he can recover ; is sensible of his approaching dissolution.

“8th.—Much worse ; refuses all nourishment.

“9th.—Apparently gone ; pulsation quivering, and an intermission of many minutes ; much convulsed ; towards night he rallied a little.

“10th.—Frequent convulsions, in which he expired eventually at one o'clock this afternoon [twenty-one days after the attack of Cholera.]

“This man's constitution was so much debilitated by previous illness [an attack of dropsy] that the first attack would have proved fatal, had he not received extraordinary attention, and his life been prolonged by the saline remedies.”

CASE VII.

“June 20th.—William Brown, age 23, was admitted into the infirmary at half-past six a.m., complaining of a sickness and vomiting ; griping pains in the intestines and severely purged ; the evacuations of a watery appearance ; pulse weak ; voice feeble ; tongue cold ; retention of urine, and cramps. Was put under the saline treatment, and a seidlitz

powder administered; injections; mustard applications and friction were also pursued.

"21st.—Patient better; the stools rather improved in appearance; warmth more natural; the saline powder continued.

"22nd.—Still better; pulse strong; stomach less unsettled. Took a little tapioca.

"23rd.—A relapse; the symptoms highly aggravated, and the patient totally collapsed; eyes sunk and glossy; cheeks hollow; the nose, lips, chin, and hands completely blue; a cold sweat on the forehead and soles of the feet. Applied mustard plasters to various parts of the body; gave a saline injection, and continued the saline powders half-hourly, and persevered in friction with hot flannels, &c., in which three nurses were employed.—This evening he rallied a little. The mustard applications, when removed, emitted a particularly offensive savour.

"24th.—Still dangerous; pulsation scarcely perceptible; countenance sallow and emaciated; the cramps again returned. A saline hot bath was recommended and eight blankets were successively applied.* He was removed to

* The manner in which the hot saline bath was administered was as follows:—To eight gallons of water, at 210 degrees of heat, were added 25lbs. of common salt, which was carefully mixed with the water. A blanket was then dipped in the solution, and having been taken out and partially strained, was wrapped round the patient's naked body, where it remained till another was prepared. Blanket after blanket to the number of six, and in some cases as many as ten, at the discretion of the medical attendant, were saturated and applied in this manner. The patient was then rubbed dry and removed to a clean bed; and in general a feeling of great relief and comfort was imparted to the sufferer.

another bed and appeared more revived. The saline remedies were unceasingly persevered in.

“25th to 28th.—The same treatment adopted; patient improving, but is very much exhausted from the severity of the attack.

“29th.—Again collapsed; the usual remedies resorted to, which were quite successful in subduing the symptoms and restoring the secretions. Patient evinces a desire to go to his friends, as his term of imprisonment has expired, but they [the medical attendants] have advised his remaining tranquil for a few days.

“30th.—Renewed his desire of returning home; and at the pressing request of his relations was permitted to leave the infirmary, although a few days, in all probability, would have restored his health. He was assisted to a coach and left to the charge of his own friends at a late hour this morning.”

CASE VIII.

“June 25th.—Joseph Allen, age 32, was admitted into the infirmary this morning at six o'clock, complaining of griping pains in the bowels; purging; irritability of stomach; great tenderness on pressure of the abdomen; coldness of the extremities; cramps, and thirst. A seidlitz powder was administered, and a mustard poultice applied to the stomach and abdomen, which was not removed till the pains had ceased. An injection of four salines in a pint and a half of warm water was given, and as it did not fully operate, in fifteen minutes it was repeated, and a copious motion immediately followed, from which the patient was relieved. Saline powders were continued every hour, and injections of [muriate of] soda every three hours. The hands and feet were enveloped in warm flannel, and the chest covered with

the same. Twelve a.m., the patient much better; the cramps have subsided. Six p.m., was considered so well that he was removed to the convalescent ward, but at night he was again seized with the griping; cramps and vomiting; coldness; pulsation imperceptible; voice indistinct; countenance lifeless; lips blue; eyes sunk, and breath cold. Mustard poultices were prepared immediately and placed as follows:—One large application all over the stomach and abdomen; one to the interior part of each arm, midway between the shoulder and elbow; one to the interior part of each thigh; one to the calf of each leg; one over the instep of each foot; and one the length of the back bone. These were not removed till animation had returned (say fifteen minutes.) The saline treatment was again pursued, and the saline powders and injections were continued, as also the friction with warm flannels. The third of a seidlitz was administered every half-hour, and soda and seltzer water from time to time to allay thirst.

“27th.—Patient considerably relieved.

“28th.—Patient much more comfortable.

“29th.—Has passed a restless night; the symptoms have returned, and he is in a complete state of collapse. Mustard applications were repeated, as also the saline injections, friction, &c. Eight p.m., a saline injection attempted to be infused into the veins, but did not succeed. [This patient could not swallow on the 29th, but his life was preserved by a warm saline fluid, which was from time to time thrown slowly into the intestinal canal.]

“30th.—More tranquil; slept last night a short time; great debility.

“July 1st.—Better; the saline remedies continued without intermission.

“2nd.—Still better; free from pain, and has now a natural warmth. Ten p.m., urine passed copiously. Two

a.m. on the 3rd, slight bowel complaint; gave an astringent injection, which allayed the purging. The saline powder ess frequently.

“3rd.—Quite improved; a regular secretion of urine and bilious evacuations; a slight degree of appetite; allowed arrow root or tapioca, but no solid food of any kind or description. A saline powder was occasionally put into his food, and taken without his knowledge. From this time the patient gradually became better, and was eventually discharged from the infirmary (17th) quite well, and is now in perfect health. 26th July, 1832.”

THE END.

WORCESTER :

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